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WHERE THE ACTION IS--AN EVALUATION, PROJECT 64-1.

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HARTFORD BOARD OF EDUCATION, CONN.

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PROJECT 64-1, AN ENRICHMENT PROJECT IN THE HARTFORD, CONN., SCHOOLS WHICH IS EVALUATED HERE, IS A MODIFIED HIGHER HORIZONS PROGRAM WHICH PROVIDES INCREASED SPECIAL SERVICES AND CULTURAL ACTIVITIES TO DISADVANTAGED YOUTH IN 14 ELEMENTARY AND TWO HIGH SCHOOLS. THE ULTIMATE GOALS OF THE PROJECT ARE TO HELP THESE YOUTH DEVELOP A SELF-IMAGE WHICH WILL MAKE THEM REACH FOR HIGHER EDUCATIONAL AND VOCATIONAL GOALS, AND TO ACADEMICALLY AND CULTURALLY EQUIP THEM FOR THE COMPETITION FOR EDUCATIONAL AND EMPLOYMENT OPPORTUNITIES. THE IMMEDIATE GOALS OF THE PROJECT ARE TO MOTIVATE THE STUDENTS TO TAKE ADVANTAGE OF THE SCHOOL'S EDUCATIONAL OFFERINGS, ASSIST THEM WITH THEIR SCHOOL ADJUSTMENT BY COMPENSATING FOR THEIR INADEQUATE HOME ENVIRONMENT, AND PROVIDE THE SCHOOLS WITH SPECIFIC INFORMATION ABOUT THE STUDENTS' ABILITIES AND POTENTIAL SO THAT TEACHERS CAN PLAN INDIVIDUALIZED INSTRUCTION. IN ADDITION TO CURRICULUM DEVELOPMENT AND READING IMPROVEMENT INSTRUCTION, THE PROGRAM OFFERS HEALTH SERVICES AND CULTURAL ENRICHMENT ACTIVITIES, AND PROVIDES THE SERVICES OF SPEECH AND HEARING THERAPISTS, PSYCHOLOGICAL EXAMINERS, GUIDANCE COUNSELORS, AND SCHOOL SOCIAL WORKERS. EACH OF THESE COMPONENTS OF THE PROJECT ARE BRIEFLY EVALUATED IN THIS REPORT. IT IS NOTED THAT ALTHOUGH EVALUATION IS AN ONGOING PROCESS, AND THEREFORE ALWAYS INCOMPLETE, THE PRESENT INDICATIONS ARE THAT THE RESULTS OF THE PROJECT ARE FAVORABLE. (JL)

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# WHERE THE ACTION IS

1966-1967

AN EVALUATION

**HARTFORD BOARD OF EDUCATION**

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**WHERE THE ACTION IS  
AN EVALUATION**

**PROJECT  
64-1**

**RESEARCH EVALUATION  
HARTFORD BOARD OF EDUCATION**

**1967**

**Prepared By**

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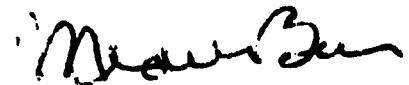
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## PREFACE

The 1967 evaluation of Project 64-1 is a continuation of the efforts begun during the 1965-66 school year. These efforts, designed not only to meet the reporting requirements imposed by law, were primarily intended to take a long hard look at a number of State and Federally funded programs. This was done in order that the findings might be communicated to the widest possible segment of the school community, thus furnishing the firing line with factual assistance for further program development.

Once again, the evaluative picture appears favorable. Not only are a number of positive evidences of growth continuing to appear, but also substantial evidences that a number of program weakness have been corrected, have appeared as well.

This evaluation, like all on-going inquiries into program development, continues to be incomplete, and thus subjects itself to periodic reappraisals. Despite this limitation, however, evidence of added educational returns indicates that Hartford's long-term investment in quality education is paying off for growing numbers of disadvantaged youth.



Medill Bair  
Superintendent

July, 1967

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PROJECT 64-1

EXTENSION OF MODIFIED HIGHER HORIZONS  
PROGRAM TO ALL POVERTY AREA SCHOOLS

(Hartford SADC Project I)

In September, 1962, following a year of study, a program of increased special services and cultural activities was inaugurated at the Wish School. In January, 1966, EOA funding permitted an expansion of the program to include six additional poverty-area schools and in August, 1966, the passage of the State Act for Disadvantaged Children provided funds to further enlarge the program. This provided coverage to the fourteen elementary and two high schools comprising Hartford's validated attendance areas.<sup>1</sup>

This program is designed to remove obstacles to learning which exist as the result of deprivation. Hopefully, this will be facilitated by increasing the available services of specially trained personnel - counselors, social workers, psychological examiners, speech and hearing therapists, and health services workers - and by providing a significant number of cultural activities to children in the poverty schools. The services, themselves, are intended to assist in:

1. Motivating children to utilize more fully available educational offerings.
2. Providing the schools with specific information about individual pupils' abilities and potential, thus furnishing the teacher with a basis for the individualization of instruction.

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<sup>1</sup> Further Data Supporting the Validation of Project Areas under Title I, Public Law 89-10. (Hartford: Research Evaluation, 1966), pp. 5. mimeographed.

3. The adjustment process toward normal school situations.

This assistance is provided by compensating for an often inadequate home environment.

Recognizing that dispelling the cumulative effects of poverty is a long term process, these special services are planned to extend over a long period of time. Ultimately, this longitudinal extension is expected to further assist disadvantaged youth in:

1. Reaching academic and cultural levels which are comparable with the competition for realistic educational and employment opportunities.
2. Developing a self image which will facilitate a quest toward higher educational and vocational goals.

On the following pages is contained a brief analysis of the activities of each of the project components for the 1966-67 fiscal year.

## SPEECH AND HEARING THERAPISTS

### OBJECTIVES

The addition of speech and hearing therapists to the validated schools provides a dual service to many needy pupils. This service involves:

1. The identification and correction of speech disorders which constitute a barrier to effective oral communication.
2. Assistance in the development of patterns of speech which are both effective for communications and conducive to an adequate self image.

Eisenson and Ogilvie describe the effects of inadequate speech as follows:

Such difficulties as a lisp or stutter are barriers to successful communication. A child with a lisp does not communicate his ideas when his environment is favorable and he is feeling comfortable. His listeners are attracted to how he is talking rather than to what he is saying. Because of the child's failure to communicate successfully, a speech defect prevents the child from taking part effectively in his environment at home, in the playground, and at school.

Another aspect of a speech defect, a subjective one, may exist. When a speech difficulty, even though it is a small deviation and does not attract unfavorable attention, looms so large in the child's mind that he is unduly self-conscious or apprehensive, it is serious and needs attention. It is then a factor that will prevent his taking part easily in his environment at home, in the playground, and at school.<sup>1</sup>

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<sup>1</sup>Jon Eisenson and Mardel Ogilvie, Speech Correction in the Schools (New York: The Macmillan Company, 1963), p. 2.

DESCRIPTION

The services of the speech and hearing therapists in the validated schools differ from those in the non-poverty areas only in terms of numbers and severity of the problems encountered. These problems are described rather clearly in an article by Ponder and can be listed under the following general classifications:<sup>1</sup>

1. An underdeveloped language facility stemming from home environments which do not stimulate a vocabulary development.
2. A level of communication which is not acceptable by the mainstream of our society.
3. Articulation problems derived from:
  - a. Poor auditory discrimination ability.
  - b. Physical disorders.
  - c. Emotional problems.
  - d. A combination of both physical and emotional disabilities.

The activities of the therapist center around the development of a one-to-one relationship with the child; a development which sequentially involves:

1. Establishment of a rapport with the child.
2. Diagnosis of the child's specific problem. This diagnosis may utilize formal or informal analysis.
3. Initiation of individual remediation. A stress is placed on oral drill and speech imitation.

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<sup>1</sup> Eddie G. Ponder, "The Ambience of Poverty," Associated Public School Systems Eighteenth Annual Conference 1966 (New York: Teachers College, Columbia University, 1965), pp. 24-25.

4. Development of applicable small group techniques which are introduced after the initial remediation has been accomplished.
5. Return of the child to the classroom. Provisions are made for a follow-up by both the teacher and parent.
6. Periodic re-appraisal. This re-appraisal considers both the adjustment of program and the possible termination of the therapist's contact.

Since an analysis of specific activities tends to distort the individualized nature of speech and hearing therapy, a picture of case referrals is presented in Table 1. Note that figures obtained for the previous year are also included for comparative purposes.

TABLE 1

A COMPARISON OF SPEECH AND HEARING SERVICES  
PROVIDED THE VALIDATED SCHOOLS, 1965-67

School	Referrals For										Total Referrals	Changes			
	Articulation			Stuttering		Hearing Loss		Mentally Retarded		65-66 66-67					
	65-66	66-67	65-66	66-67	65-66	66-67	65-66	66-67	65-66	66-67					
Arsenal	45	72	8	2	6	2	1	4	4	57	76	+19			
Barnard-Brown	29	19	19	5	2	1	2	1	1	42	42	+42			
Brackett-Northwest	33	49	33	4	1	6	4	3	4	54	60	+ 4			
Burns	33	33	33	4	1	4	3	3	3	40	40	+40			
Hooker	48	48	48	1	1	1	1	1	1	53	53	+53			
Northwest-Jones	50	44	13	22	13	22	6	1	1	70	66	- 4			
Wish	49	49	49	3	3	3	7	7	7	53	53	+53			
Hartford Public High School	24	16	11	10	11	10	4	4	4	35	31	- 4			
Hartford Public High School Annex	3	3	3	6	3	6	1	1	1	9	9	+ 9			

An analysis of Table 1 reveals:

1. An increase of 33% in the total numbers of cases handled.<sup>1</sup>

This probably can be attributed to two factors:

- a. An increase in the staff - from four to seven.
- b. An increase in the total time devoted to the coordination of the program.

2. Approximately 80% of the cases continue to be in the area of articulation while 14% were classed as stuttering problems. These figures represent an increase of 11% in the articulation cases to a level approximating the national norm of 81%, and an increase of 13% in the number of stuttering cases handled. This latter figure continues for the second year to fall well above the national stuttering case load average of 1%.

In addition to an increase in the case load data, a number of program changes were reported. These changes included:

1. Additional program supervision. The coordinator was no longer required to direct both the speech and hearing and the speech improvement (SADC Project III) programs. Consequently, more time was devoted to staff supervision.
2. Scheduled coordination time. Each Monday afternoon was kept free by staff members to permit an on-going coordination and development of program. Reported activities included:

---

<sup>1</sup>430 cases were handled during 1966-67 in contrast to a total case load of 216 during the previous year.

- a. Conferences with parents and teachers.
- b. Individual evaluation and therapy sessions for youngsters.  
having difficulty in learning new sound patterns.
- c. Group meetings for clinicians during the first five months of school.
- d. Joint meetings with other clinical facilities. These facilities included the Newington Crippled Children's Hospital and the total hearing staff.
- e. Monthly professional guest speakers. The speakers and their topics included:
  - 1) Mrs. Norma Smith: The Dwight School Language Training Program.
  - 2) Dr. Margaret Byrne, University of Kansas: Correlation of WISC Items between Culturally Disadvantaged and Non-Disadvantaged Children.
  - 3) Mrs. Arlene Matkin, Mansfield State Training School: Speech Therapy for the Mentally Retarded.
  - 4) Mrs. Lois Maglietto: English as a Second Language.
  - 5) Miss Karen Graber: The Hartford Speech Improvement Program.
- f. The development of a new speech and hearing record card and a departmental progress report form. These forms will be used to record clinical information on a periodic basis, thus providing a constant source of technical information about the child and his on-going progress.

- g. Eight staff members and the coordinator attended the national convention of the American Speech and Hearing Association. Two clinicians were from the project.
- h. Emphasis has been placed on working with small groups in a therapeutic setting. Since very few of the children with whom the therapist works can receive assistance with their new speech patterns within the home, they must receive a maximum of assistance during the therapy session. As a result of this work with smaller groups, the dismissal rate has increased.

Perhaps an understanding of the total strengths and weaknesses of the program can be obtained in the following excerpt from a clinicians report:

By limiting the number of children in my caseload this year, I have seen many of the children make considerable progress. In some instances it was possible to see children three or even four times each week, giving a more concentrated amount of therapy than would be possible with a larger caseload. Many children who could profit most from individual instruction were seen individually. Being at ----full-time has enabled me to establish a close working relationship with many of the teachers and other staff members.

I feel that the principal and classroom teachers at ---- need to become more aware of the services of the speech therapist and more attuned to the goals of an effective program of speech therapy. Individual conversations with teachers and with the principal have helped, but more could be done in this area.

There are some children who may have made better progress in therapy if more contact had been established between therapist and parent.

A number of individual clinicians contributed to the program.

These contributions included:

1. The development of a brief written report form which could be completed by a teacher and inserted in a cumulative record folder. The form was designed to provide the receiving teachers with the information necessary to immediately continue speech implementation.
2. The successful inclusion of operant learning techniques into a therapy program at one school.

ANALYSIS OF STAFF REQUIREMENTS

The full quota of seven therapists was filled prior to the opening of school in September, 1966.

Four new therapists were hired, thus filling the three new positions and providing a replacement for one resignation. Assignments are shown in Table 2.

TABLE 2  
ASSIGNMENT OF SPEECH AND HEARING THERAPISTS  
TO THE VALIDATED SCHOOLS, 1966-67

School	Number of Therapists Assigned
Arsenal	1
Barnard-Brown	$\frac{1}{2}$
Bracket	1
Burns	$\frac{1}{2}$
Hooker	1
Hartford Public High School	1
Northwest-Jones	1
Wish	1

PROBLEM AREAS

A number of problems have been reported by the program coordinator.

These include:

1. With a total staff of nineteen, additional supervisory assistance is necessary.
2. A continued difficulty in hiring qualified therapists particularly those trained to work with aphasia.
3. A paucity of staff training in language background. This is complicated by the prevalence of language problems among the city's disadvantaged.

4. Improved school facilities for clinicians.
5. The need to develop a program of supportive cooperation among the parents of the disadvantaged.

#### EVALUATION

The employment of seven clinicians constitutes a component service which can best be evaluated in terms of three related service areas:

1. The correction or improvement of children's speech disorders.
2. The improvement of oral communications.
3. The total effects of the service in support of the instructional program.

Although specific figures are not available, clinician comments on reports submitted to the coordinator indicate that:

1. Additional time was available for both individual speech correction and improvement.
2. The use of this time produced more positive speech changes in the children worked with than were previously noted.

The effects of the service in support of the instructional program can partially be assessed by a tabulation of teacher responses to a Program Evaluation questionnaire. (a copy is contained in Appendix A) This questionnaire was distributed to a random selection of twenty-five classroom teachers throughout the system as part of a total program evaluation. Because of the limited size of the sample and a return of only eleven responses - 44% of those contacted - the results contained in the following table cannot be assumed to be indicative of the effects of the speech program as viewed by the typical classroom teacher.

TABLE 3  
CLASSROOM EFFECTS OF A SPEECH AND  
HEARING PROGRAM AS RATED BY 11 TEACHERS, 1966-67

Question	Percentage of Responses					
	Much	Some	More	Some Adverse Effects	Cannot Judge	No Response
Do you think this program has helped to:						
Improve pupils' scholastic achievement?	9	27	9	0	27	28
Improve pupils' study habits?	0	27	18	0	18	37
Improve pupils' attitudes toward learning?	9	36	9	0	18	28
Improve pupils' classroom behavior?	0	18	18	9	18	37
Improve pupils' out-of-class behaviour?	0	27	0	0	46	27
Improve pupils' relations with their peer group?	18	27	0	0	27	28
Improve pupils' relations with you, their teacher?	0	36	9	0	27	28
Increase pupils' interest in books, arts, music, theatre, etc.?	0	27	9	0	36	28
Has this program <u>helped</u> you to:						
Identify pupils with academic potential?	0	18	18	0	36	28
Identify pupils with talents and interests other than academic?	0	18	9	0	46	27
Expect a higher level of achievement from your pupils?	0	27	18	0	27	28
Has this program:						
Increased parents' interest in the school?	9	18	0	0	46	27
Improved parents' cooperation with you?	9	9	9	0	46	27
Has this program helped to:						
Adapt or enrich the curriculum to meet the needs of the class?	0	27	18	0	18	37
Provide the class with necessary remedial or corrective services?	18	18	18	0	18	28
Provide you with more time and freedom for work?	0	0	55	0	18	27

Despite the limitations of the sample, a number of interesting observations can be made from the preceding table.

1. The most frequently rated areas of pupil changes were in improved peer group relationships and attitudes toward learning.
2. Only one teacher felt that the program adversely affected classroom behavior.
3. 38% of the respondents indicated that the speech and hearing program had been helpful - but 41% did not comment on its effects.
4. 72% of the respondents felt the speech and hearing program should be continued. Of these, 18% indicated that some modifications were in order.

Perhaps three tentative conclusions can be inferred from the available teacher comments:

1. The program is necessary and does help children speak better - but teachers know little about the service, per se.
2. There is a tendency to identify the clinician's role with areas which may not relate to a therapeutic service; i.e. curriculum or instructional improvement.

#### SUMMARY AND CONCLUSIONS

A substantial increase in numbers of project staff and in the available time for coordination resulted in a 100% increase in the total number of children receiving speech and hearing services during the past school year. From information available, it can be inferred

that (1) considerably more children - 430 as opposed to a total of 216 last year - were helped to correct or improve their speech and (2), classroom teachers felt that this improvement had some positive effects on the total instructional program.

No attempt has been made to assess individual pupil speech changes, but, hopefully, this will be accomplished at a later date.

## PSYCHOLOGICAL EXAMINERS

### OBJECTIVES

This component provides the validated schools with extensive psychological evaluation of pupils. The psychological services are designed to:

1. Provide the teacher with information about the needs and abilities of individual pupils.
2. Assist the teacher in the interpretation and utilization of the assessment data.

### DESCRIPTION

The psychological examiner is primarily a service person who functions in support of the instructional program. By evaluating individual pupils who are referred, the examiner is able to provide school personnel with interpreted information thus:

1. Resolving questions of individual placement.
2. Providing an insight into the pupils' social and emotional problems.
3. Helping both the teacher, other school personnel and the parent to better understand the child and provide for his individual learning needs.

An analysis of the psychological services provided the validated schools is contained in Table 4. It should be noted that the services of the four project .. employed examiners are pro-rated among the validated schools to insure an adequacy of coverage. Consequently,

reported figures represent a total of all services provided since no attempt is made to distinguish between SADC and non-SADC paid time.

TABLE 4

A COMPARISON OF PSYCHOLOGICAL SERVICES PROVIDED PUPILS IN THE VALIDATED SCHOOLS,  
1965-1967

School	No. of Individual Tests Administered		Conferences <sup>a</sup>		Consultations <sup>b</sup>		Observations <sup>c</sup>	
	1965-66	1966-67	1965-66	1966-67	1965-66	1966-67	1965-66	1966-67
Arcenal	328	212	194	117	146	90	12	3
Barbour	122	111	89	78	21	76	0	0
Barnard-Br.	249	287	148	165	80	110	0	11
Brackett	328	358	211	227	116	249	13	25
Burns	d	91	d	81	d	46	d	2
Hoecker	217	304	193	182	78	70	8	7
Kinsella	162	99	93	94	45	57	0	0
N.W.Jones	324	284	145	190	37	93	3	2
Vine	199	190	230	265	47	180	12	14
H.P.H.S. & Annex	254	347	219	383	330	294	6	7
W.H.School	167	237	213	246	78	79	0	0

<sup>a</sup>Discussions of pupils studied during the reporting period.

<sup>b</sup>Discussions of pupils not studied during the reporting period or discussion of a group or other school problem.

<sup>c</sup>Classroom visit to note behavior or establish rapport prior to testing.

<sup>d</sup>Services provided from the regular budget.

The services described in Table 4 can be further amplified when one considers that:

1. Each evaluation requires at least five hours of the examiner's time, and
2. Conferences and consultations are often equally time consuming.

Individual pupil assessments usually involve the administration and interpretation of a number of recognized tests and techniques. A city-wide tabulation of the individual tests administered during the 1966-67 school year, together with similar data from the preceding year is contained in Table 5.

TABLE 5

INDIVIDUAL TESTS ADMINISTERED TO CITY PUPILS BY PSYCHOLOGICAL EXAMINERS, 1965-67

Tests	Number Administered	
	1965-1966	1966-1967
<u>Intelligence:</u>		
<u>Revised Stanford-Binet</u> ; form L-M; 1960	511	409
<u>Wechsler Intelligence Scale for Children</u> ; 1949	543	551
<u>Wechsler Bellevue I, II, and W.A.I.S.</u> ; 1939; 1947; 1955	163	214
<u>Peabody Picture Vocabulary</u> ; 1965	101	139
<u>Leiter International Performance Table</u> ; 1952-1955	108	70
<u>Illinois Test of Psycholinguistic Abilities</u> ; 1961	5	5
<u>Personality (Projective):</u>		
<u>Rorschach</u> ; adaptations 1921-54	126	122
<u>Thematic Apperception Test and Michigan Pictures</u> ; 1936-43; 1953	114	137
<u>Bender Gestalt Visual Motor Test</u> ; 1946	1104	1117
<u>Figure Drawing</u> ; Goodenough, 1926; Machover, 1949	1111	1124
<u>Sentence Completion</u> ;	204	279
<u>Rosenzweig Picture Frustration</u> ; 1944-49	25	8
<u>House-Tree-Picture</u> ; 1955	117	98
<u>Miscellaneous</u> ;	98	256
<u>Achievement:</u>		
<u>Wide Range Achievement Test</u> ; 1946	76	97
<u>Kindergarten Survey</u> :		3,072

ANALYSIS OF STAFF REQUIREMENTS

For the second consecutive year, this project component was provided with the funds to employ four psychological examiners. Examiner positions were assigned to provide a maximum of school coverage and this coverage was based upon a departmental assessment of the needs of each validated school. Despite the shortage of qualified personnel, and two unfilled positions in the department, the majority of validated schools received full service, while shortages in personnel were made up in the non-poverty schools. The assignment of personnel to the validated schools is contained in the following table.

TABLE 6

SADC PSYCHOLOGICAL EXAMINER ASSIGNMENTS BY SCHOOL,  
1966-67

School	Total Percentage of Examiner Time
Arsenal	75
Barbour	20
Barnard-Brown	50
Brackett	35
Burns	20
Hooker	30
Northwest-Jones	35
Kinsella	35
Hartford Public High School and Annex	70
Vine	20
Weaver High School	50

The totals contained in Table 6 continue to show that services in excess of those funded under the project component have been furnished the validated schools. This is particularly noteworthy when one considers the overall shortage of personnel in the department and the demands for psychological service of other city schools.

PROBLEM AREAS

For the second consecutive year reported problem areas included:

1. A continued shortage of trained personnel.
2. The difficulty of accounting for project services. This is extremely time-consuming for the coordinator since the services of the four examiners are divided among eleven different schools.

EVALUATION

The operational goal of the project component was to provide more psychological services to the validated schools. How well this was accomplished is shown in Table 7, below.

TABLE 7  
AN ANALYSIS OF PSYCHOLOGICAL SERVICES FURNISHED THE VALIDATED SCHOOLS  
OVER A TWO YEAR PERIOD, MAY, 1965 THRU MAY, 1967

Service Rendered	1965-1966	1966-1967	Change
Pupils Served	715	718	+ 3
Tests Administered	2,350	2,520	+170
Conferences	1,735	2,028	+293
Consultations	978	1,324	+346
Observations	54	71	+ 17

Table 7 is particularly important since it clearly indicates an extension in both the numbers and the scope of furnished psychological services. This extension can be further demonstrated by:

1. An increase in the average number of individual tests administered - from 3.286 to 3.510 -- over a two-year period.
2. An increased use of conference time. This time has been increased from a per pupil average of 2.43 in 1965-66 to 2.83 during the 1966-67 school year; an increase which shows that substantial efforts continue to be devoted to pupil follow-ups.
3. A considerable increase in consultations. This area showed the largest increase in utilization during the past year, and enabled examiners to assist more pupils with problems which did not require extensive or individual evaluations.

In order to assess the impact of the psychological services on the classroom, a Program Evaluation form was randomly distributed to nineteen classroom teachers. Comments on the returns, representing sixteen teachers - 84 percent of the total sample - indicated that:

1. The psychological services are valuable to the referred children. These particular teachers, as a group, indicated that they had little direct contact with the psychologists since:

- a. They had not had the occasion to refer children. (The psychologist contacts referring teachers directly as an essential part of the service.)
  - b. The teachers were at the high school level. (High School referrals are channeled through the guidance counselor.)
2. Teachers tend to view the psychologist as a therapist rather than as a diagnostician. This view is held despite a continuing attempt by the department to orient the staff to the purposes and extent of the available services.

#### SUMMARY AND CONCLUSIONS

For the second consecutive year, the continued employment of additional psychological examiners provided the validated schools with significant numbers of supportive services. These services, while not evaluated directly in terms of pupil growth, are expected to continue to provide school personnel with assistance in the identification and resolution of individual pupil problems.

## HEALTH SERVICES

### OBJECTIVES

This service component continues to provide pupils in a number of validated schools with both the preventive and corrective aspects of a total health program. Services are provided in the areas of:

1. School nursing.
2. Vision and auditory testing.
3. Dental hygiene.

### DESCRIPTION AND STAFF REQUIREMENTS

Funds were provided to:

1. Continue the employment of one school nurse to service both the Hartford Public High School and the ninth grade Annex.
2. Employ one dental hygienist. This position was authorized during the previous fiscal year but the position was not filled until January 1967.

Under the original project, funds were provided for both ophthalmological and psychiatric consultations. The ophthalmologist's services were intended to assist visually handicapped children who were referred to the reading clinic (Project II) but these services were not required. Funds for the services of the psychiatrist were transferred to the Social Work department and these consultant services will be discussed later in this report.

An analysis of the SADC nurse's activities at both Hartford Public High School and the Annex, together with some comparisons with the previous year's figures, are contained in Table 8.

TABLE 8

SADC NURSING ACTIVITY IN ONE VALIDATED SCHOOL, 1965-1967<sup>a</sup>

Activity	1965-1966	1966-1967	Change
Number of individual health inspections	1789	3048	+1259
Number of nurse conferences with parent			
a. at school	28	422	+ 394
b. by telephone	660	677	+ 17
Number of nurse conferences with teacher at school	377	504	+ 127
Number of nurse conferences with pupil			
a. at school	1319	711	- 608
b. at home	4		
Number of pupils given first aid			
a. by nurse	622	274	- 348
Number of pupils given vision tests			
a. by nurse	988	463	- 525
Number of pupils for whom school program was adjusted			
a. because of vision	4		- 4
b. because of hearing	3		- 3
c. other: gym Doctor's notes	75 16	130	+ 55 - 16
Number of pupils recommended			
a. for exclusion	125	164	+ 39
b. for readmission	64	55	- 9
Miscellaneous	73	333	+ 260

<sup>a</sup>Figures for each year have been computed through June 1.

An inspection of Table 8 reveals that the reported number of activities have shown substantial changes. Of particular interest are:

1. The total increases in individual health inspections and in the number of conferences held by the nurse with both teachers and parents.
2. A large decrease in the reported numbers of pupil conferences, first-aid treatments to pupils, and vision tests.

While no attempt has been made to equate these activity shifts with either the preventive or the corrective aspects of the program, it is apparent that these shifts should remain the subject of further inquiry.

The second member of the SADC health team, a dental hygienist, was employed in January 1967. A tabulation of her activities follows in Table 9.

TABLE 9

ACTIVITIES OF ONE SADC DENTAL  
HYGIENIST, JANUARY-JUNE 1, 1967<sup>a</sup>

ACTIVITIES	REPORTED TOTALS
No. of pupils examined:	3424
without decay:	1271
With decay:	1911
a. Temporary teeth:	782
b. Permanent teeth:	646
c. Both temporary and permanent teeth:	483
No. of pupils known to have started treatment	199
No. of completed cases after school examination	140
No. of pupils in third grade who received prophylaxis	228
Total healthy mouths	1476
Parent Consultations	207
Conferences with pupils	1919
Conferences with others	971

<sup>a</sup>Schools serviced include Arsenal, Clark, Brackett, Vine and West Middle.

EVALUATION

The evaluation of the Health Service project component is based upon an assumption that additional preventive and corrective health activities, supplied by a nurse and a dental hygienist, will eventually be reflected in:

1. An improvement in the general health of the pupil and
2. An eventual positive impact on the learning situation. This impact will be made by:

- a. Minimizing the after-effects of a pupil illness.
- b. Promoting good health as a necessary ingredient for optimal learning.

SUMMARY AND CONCLUSIONS

The Health Service component, by employing one nurse and one dental hygienist, continues to furnish a substantial number of preventive and corrective services to poverty area pupils. In terms of the data reported it can be assumed that both the nurse and the hygienist provided the health services contemplated in the proposal.

## GUIDANCE COUNSELORS

### OBJECTIVES

As part of a total pupil personnel approach to the problems of motivation associated with poverty, the employment of eight counselors was authorized under this component. These counselors were expected to:

1. Identify the special needs, abilities and interests of disadvantaged students.
2. Help these students develop the skills and attitudes necessary for employment.
3. Provide the students with timely occupational information.
4. Attempt to encourage students to complete high school rather than becoming drop-outs.

### DESCRIPTION

To provide these services nine counselors and three secretaries were added to the existing staff during the 1965-66 school year. Of these positions, one counselor was not available during the current school year since he was on leave. The present counselor assignments are summarized in Table 10 which follows:

-30-

TABLE 10  
SADC COUNSELOR ASSIGNMENTS, 1966-67

School	Number of Positions	Assigned Grades
Arsenal	1	6
Barnard-Brown	1	K-8
Hartford Public High School	2	9-12
Northwest-Jones	1	7
Weaver High School	2	9-11

A number of program activities were reported by the counselors.  
These are summarized in Table 11.

TABLE 11  
SADC COUNSELOR ACTIVITIES, 1966-67

Activity	No. of Counselors N=7
Individual counseling	5
Group counseling	5
Staff conferences	3
Curriculum modifications	2
Parent conferences	2
Cultural activities	2
Referrals to other services	2
Test interpretation	1
Record keeping	1

While no data was presented for analysis, counselors reported that a number of instruments and/or techniques were used to measure individual pupil growth. These included observations, grade assessments, absentee studies, and some use of individual test techniques.

The most effective activities of the counselors were reported as follows:

TABLE 12

EFFECTIVE PROJECT ACTIVITIES  
AS REPORTED BY 7 SADC COUNSELORS, 1966-67

Activity	No. of Counselors Reporting
More effective individual counseling <sup>a</sup>	6
Improved communications <sup>b</sup>	5
Professional improvement <sup>c</sup>	2
Organizational patterns <sup>d</sup>	5
Development of more effective counseling techniques <sup>e</sup>	4
Other <sup>f</sup>	2

<sup>a</sup>No extra assignments, improved case load, etc.

<sup>b</sup>Contacts with parents, staff, outside agencies, etc.

<sup>c</sup>Professional meetings, fuller utilization of the counselor's abilities and interests.

<sup>d</sup>Scheduling, development of program, administrative involvement, sex differentiations in counseling, following groups.

<sup>e</sup>Flexibility, development of more effective evaluative techniques.

<sup>f</sup>Cooperation of staff, physical facilities.

A number of problem areas were reported. Perhaps the most significant of these is the absence of a departmental coordinator to fill a position vacated during the summer of 1966. While the assistant

1. The excessive counseling case loads reported last year have been effectively reduced.
2. Clerical duties, while excessive, are more closely related to direct pupil services.
3. The day-to-day scheduling of conferences is relatively effective -- although the counselor is still required personally to do most of the actual scheduling.

While no direct comparisons can be made with the reports of activities submitted during the previous year, a number of inferences can be drawn:

1. Counselors feel that they are helping children, both individually and in small groups. It should be noted that during the first year of the program teachers reported that the counselor's services were (1) not fully understood or utilized and, (2), were most effective in assisting teachers to use cultural activities in support of the curriculum.<sup>1</sup>
2. It appears, again by inference, that the counselors employed under this project have been successful in developing a suitable rapport with the students and staff in their individual schools.

#### ANALYSIS OF STAFF REQUIREMENTS

This component continues to provide funds for the employment of eight counselors (3 assigned to the high schools and 5 to the elementary schools), and three secretaries. While one counselor position was not utilized due to a personal leave, it is expected that the situation will be remedied during the coming year.

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<sup>1</sup>Ibid., pp. 12-23

EVALUATION

While the evaluation of this component has been somewhat hampered by the lack of a full-time coordinator, some data is available.

A questionnaire, developed jointly by research evaluation and the guidance department during the spring of 1966, was distributed to the two schools with elementary (K-6) guidance coverage. The responses of ten teachers to the question, "Do you think the guidance program has been effective (in terms of the following changes?)", are contained in Table 14.

TABLE 14  
EFFECTIVENESS OF THE ELEMENTARY COUNSELING PROGRAM BY PERCENT OF TEACHER RESPONSES, 1966-67\*

Charge	Much Adverse Effect %	Some Adverse Effect %	No Effect %	Some Positive Effect %	Some Positive Effect %	Much Positive Effect %
1. Improving pupils' scholastic achievement	0	0	60	40	0	0
2. Improving pupils' work and/or study habits	0	0	60	30	10	
3. Improving pupils' attitudes to learning	0	0	40	50	10	
4. Improving pupils' classroom behavior	0	0	30	60	10	
5. Improving pupils' relations with their peer group	0	0	30	70	0	
6. Improving pupils' relations with their teachers	0	0	10	60	30	
7. Improving pupils' interest in books, art, music, theatre, etc.	0	0	50	40	10	
8. Identifying pupils with academic potential	0	0	25	63	13	
9. Identifying pupils with talents other than academic	0	0	56	44	0	

TABLE 14 (Continued)

	Change	Much Adverse Effect %	Some Adverse Effect %	No Effect %	Some Positive Effect %	Much Positive Effect %
10.	Improving parents' interest in the school	0	0	33	44	22
11.	Improving parents' cooperation with the school	0	0	30	50	20
12.	Raising teachers' educational expectations for these pupils <sup>a</sup>	0	0	50	39	13
13.	Helping teachers in adapting <sup>b</sup> and enriching the curriculum	0	0	56	22	22
14.	Providing aid to teachers for better understanding of pupil problems	0	0	11	44	45
15.	Assisting teachers in securing additional guidance and remedial services for pupils <sup>c</sup>	0	0	25	33	38
16.	Assisting teachers in using cultural activities <sup>b</sup> for curriculum purposes <sup>b</sup>	0	0	23	22	44

Because of rounding, detail will not always add to 100%.

\* N=16

<sup>a</sup> N=3

<sup>b</sup> N=9

An analysis of 149 item responses contained in Table 14 are summarized below:

TABLE 15

ANALYSIS OF TEACHER QUESTIONNAIRE RESPONSES, 1966-67

Total Item Responses	Much Adverse Effect	Some Adverse Effect	No Effect	Some Positive Effect	Much Positive Effect
149	0%	0%	38%	43%	17%

From the data contained in Tables 14 and 15, the following partial conclusions can be drawn:

1. Respondent teachers indicate that the addition of a counselor at the elementary level has had some positive effects in all the areas investigated.
2. Of the total item responses tallied, 62 percent indicated that the program had positive effects, while no indication was made of any adverse program effects.
3. Apparently, the greatest changes occurred in the areas of improving pupils' relations with their teachers (90%), and in providing aid to teachers for better understanding of pupil problems (89%).

In addition to the cited figures, teacher comments on the questionnaire further indicated that:

1. The guidance program should be continued.

2. The services of the counselor are valuable in helping children - although the areas of help do not seem to be completely understood by the reporting teachers.
3. The counseling role needs further clarification. This is a perpetual problem faced by counselors.

SUMMARY AND CONCLUSIONS

During the project year, the services of seven counselors and three secretaries were furnished to five of the city's validated schools. Despite an absence of objective data, information submitted by both counselors and teachers continues to support the contention that the counselor has become an effective agency in the motivation and encouragement of poverty-area youth.

## SCHOOL SOCIAL WORKERS

### OBJECTIVES

Specifically, the addition of eight social workers and one secretary to the validated schools was intended to:

1. Develop a closer working relationship between the school and the home.
2. Encourage parents to participate in the adult education program.
3. Provide both the parent and the child with a contact for the further utilization of social services.

### DESCRIPTION

For the second successive year the services of eight social workers and one secretary were provided under this component. The assignments of the social workers to the various validated schools shown in Table 16 while a description of the social services can be found in the Evaluation 1965-66.<sup>1</sup> It should be noted that one-half position was not filled during the year, but this in itself did not constitute a major problem.

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<sup>1</sup>Ibid., pp. 29-30, 32-34.

TABLE 16

SADC SOCIAL WORKER ASSIGNMENTS, 1966-67<sup>a</sup>

School	Assignment %
Arsenal	1.00
Barbour	.20
Barnard-Brown	1.00
Brackett-Northeast	1.00
Clark	.50
New Park	.10
Northwest-Jones	1.00
Vine	.20
Hartford Public High School	1.00
Hartford Public High School Annex	1.00
Weaver High School	.50

<sup>a</sup>April 1, 1967

The table which follows is particularly important when one considers that the majority of social service cases are referred by teacher, principals, parents, and occasionally the child himself. A comparison of 1966-67 social service referrals with those submitted for the previous school year are shown in Table 17.

TABLE 17

A COMPARISON OF SADC SOCIAL  
WORK REFERRALS, 1965-67

Reason for the referral	Percentage of total case load		
	65-66	66-67	Change
Behavior or personality problem	65	64	-1
School attendance	15	16	+1
Underachievement	12	9	-3
Neglect or other environmental factors	8	11	+3

The lack of change reflected in the preceding table is revealing in that it tends to further substantiate the high percentage of behavioral and personality problems known to be present in many poverty populations.

Table 18 continues to document the social work activities of this component with a comparison of figures submitted over a two year period.

TABLE 18

ANALYSIS OF SCHOOL SOCIAL WORK ACTIVITIES  
IN VALIDATED SCHOOLS, 1965-67

Activity	Numbers Reported		
	65-66	66-67	Change
Pupil interviews	4527	5537	+1012
Parent interviews	1197	2019	+ 822
Conference with teachers, principals, and other school personnel	4235	5604	+1369
Contacts with community agencies <sup>a</sup>	2847	3243	+ 396
Home visits	723	842	+ 119

<sup>a</sup>Agencies include mental health clinics, welfare agencies, medical resources, police, and the juvenile court.

Note that the validated school social service gains reflected in Table 18 and the city-wide service gains shown in Table 19 have been reported in all tabulated areas for the second consecutive year. These gains are particularly important when one considers that the staff was only increased by one position in September 1966 and by an added one-half position in the following January.

TABLE 19

A COMPARISON OF CITY-WIDE SCHOOL SOCIAL SERVICES  
OVER A THREE YEAR PERIOD, 1964-1967

Service	1964-65	1965-66	1966-67	Change
Pupil interviews	11,190	15,342	17,242	+1900
Parent interviews	4,696	5,799	6,117	+ 338
Conferences with teachers, principals, and other school personnel	16,974	17,075	19,736	+2661
Contacts with community agencies	6,007	6,670	7,031	+ 361
Home visits	1,931	2,637	3,070	+ 433

EVALUATION

An analysis of the available data continues to indicate that:

1. Substantial social work services are being furnished to the validated schools.
2. Social work activities in both the validated schools, and in the city as a whole, have steadily increased over the past two years.
3. Ratings submitted by thirteen teachers, contacted at random, indicate that they feel:
  - a. The program is successful in helping children.
  - b. The program should be continued.

SUMMARY AND CONCLUSIONS

For the second consecutive year, social work services were provided to the validated schools in sufficient numbers to assist over 2000 poverty area youngsters. While no measurable relationship between the services provided and observable pupil changes has been documented, it is expected that this relationship will be more accurately assessed at a later date.

## CULTURAL ENRICHMENT

### OBJECTIVES

The addition of special service personnel and cultural activity funds to the most poverty-ridden areas of the city was aimed at two ultimate objectives:

1. To raise the level of academic aspirations and achievements for the disadvantaged children in the city.
2. To provide a number of cultural activities designed to assist in the long-range improvement of the child's standard of living.

### DESCRIPTION

The availability of SADC funds continued to provide a substantial number of youngsters with activities designed to:

1. Compensate for the art, music, and literature deficiencies often existing in poverty-area homes.
2. Provide artistic and musical instruction to children with an interest in these arts.
3. Expose pupils to literature as part of their cultural heritage.
4. Acquaint youngsters with the resources and points of interest available in the City of Hartford.

Allocations to the various schools were based on a rough standard of \$4.00 per pupil. This was slightly less than the previous year's figure of \$4.50 per pupil since the cultural services were expanded to cover, for the first time, both the Fox and Burr schools.

The control of cultural funds was coordinated through the offices of instruction in accordance with the procedure established for the 1965-66 school year. A discussion of these procedures, together with samples of the applicable forms can be found in the 1965-66 Evaluation.<sup>1</sup>

### EVALUATION

This evaluation attempted to answer three questions:

1. What cultural experiences were provided pupils under this component?
2. How did these activities compare with those reported for the 1965-66 school year?
3. What are the immediate effects of the cultural activities on pupils in the validated schools?

To obtain answers to these questions, a questionnaire developed by the Northwest-Jones cultural committee was administered to approximately 1500 Northwest-Jones pupils in grades K through 8. Responses were received from forty-five teachers and these included the information obtained from 1052 pupils; a figure representing 66 percent of the school's population and approximately 8 percent of the validated elementary attendance districts.<sup>2</sup>

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<sup>1</sup>Ibid., pp. 86-87

<sup>2</sup>Enrollment Survey, January 27, 1967.

A summary of the reported cultural activities and a comparison with the previous year's figures are contained in Table 20.

TABLE 20

PLANNED CULTURAL ACTIVITIES AT THE NORTHWEST-JONES  
SCHOOL OVER A TWO YEAR PERIOD, 1965-67

Cultural Activities	Total Pupil Participations		
	At the End of Program Year May, 1966	At the End of Program Year May, 1967	Change
Museums	930	1169	+ 239
Arts	4154	1316	-2838
Official Bldgs. & Schools	2024	2598	+ 574
Utilities	1199	1051	- 148
Points of Interest	4180	4189	+ 9
Tours, Trips, Parks, & Beaches	4646	1481	-3165
Sports	472	466	- 6
Entertainment, T.V., Shows, Circus, etc.	882	2805	+1923
Restaurants	828	682	- 146

An analysis of the preceding table reveals that:

1. Pupils reported an average of 13.6 experiences at the end of 1966-67 as opposed to a per pupil average of 16.1 reported in 1965-66. It should be noted that these averages indicate a level of continuing cultural involvement. They do not truly represent a yearly change since no attempt was made to

isolate any pupil experience by either (1) school sponsorship or (2), the actual year of occurrence. This latter information is particularly difficult to obtain from younger children.

2. The trend in pupil involvement seems to be shifting from recreational tours and the arts toward an entertainment and school orientation. No conclusions however, can be drawn from this trend at the present time.

A partial assessment of the immediate efforts of added cultural activities was obtained through the use of a Program Evaluation form. This form was distributed to twenty-two teachers with 100% returns. A tabulation of the responses is contained in the table which follows:

TABLE 21

THE EFFECTS OF A CULTURAL ACTIVITY PROGRAM AS REPORTED BY  
22 TEACHERS, 1966-67

Question	Percentage of Responses					
	Much	Some	None	Some Adverse Effects	Cannot Judge	No Answer
Has your class participated in this program?	27	55	9			
Do you think this program has helped to:						
Improve pupils' scholastic achievement?	9	36	9	0	36	9
Improve pupils' study habits?	5	32	23	0	32	9
Improve pupils' attitudes toward learning?	14	55	5	0	18	9
Improve pupils' classroom behaviour?	5	18	46	0	23	9
Improve pupils' out-of-class behaviour?	18	23	14	0	36	9
Improve pupils' relations with their peer group?	14	32	14	0	32	9
Improve pupils' relations with you, their teacher?	18	18	18	0	36	9
Increase pupils' interest in books, art, music, theatre, etc?	32	41	5	0	14	9
Has this program <u>helped</u> you to:						
Identify pupils with academic potential?	5	41	27	0	18	9
Identify pupils with talents and interests other than academic?	9	46	23	0	14	9
Expect a higher level of achievement from your pupils?	9	41	27	0	14	9
Has this program:						
Increased parents' interest in the school?	5	14	23	0	50	9

TABLE 21 (continued)

Question	Percentage of Responses					
	Much	Some	None	Some Adverse Effects	Cannot Judge	No Answer
Has this program:						
Improved parents' cooperation with you?	9	9	36	0	36	9
Has this program helped to:						
Adapt or enrich the curriculum to meet the needs of the class?	18	55	0	0	9	9
Provide the class with necessary remedial or corrective services?	14	18	32	0	18	18
Provide you with more time and freedom for work?	0	14	59	0	14	14

Table 21 points out a number of interesting facts:

1. No adverse program effects were reported.
2. Teachers indicated that the program was most helpful in:
  - a. Increasing pupils' interest in books, art, music, theatre, etc. (73%), and in
  - b. Adapting or enriching the curriculum to meet the needs of the class (73%).
3. The program was rated least effective in terms of:
  - a. Improving pupils classroom behavior (46%).
  - b. Providing the teacher with more time and freedom for work (59%).

4. At least:

- a. 23% of the responding teachers felt the program had helped children in all of the areas rated.
- b. 46% felt that the program had helped the teacher to know more about their classes.
- c. 18% - the lowest area of positive responses - felt the program had helped in furthering parent-school relationships.

In addition to the items mentioned, comments on the questionnaire indicated:

1. Overall (100%) teacher agreement that the program should be continued.
2. That pupil participation helped "...the [children] to relate to the total school program as a laboratory for learning, not solely as a cubicle for conformity."

SUMMARY AND CONCLUSIONS

A variety and number of cultural activities continued to be provided to pupils in the validated schools during the 1966-67 school year. An examination of data supplied by a sample of teachers and pupils indicates that the cultural services have been successful in partially compensating for the childrens' limited cultural horizons of the past and in providing each child with a broader base of experience for the future.

## CURRICULUM DEVELOPMENT AND RESEARCH TEAMS

(Hartford SADC Project IIa)

### OBJECTIVE

The operational objective of this project was to provide two curriculum teams. These teams were designed to:

1. Construct a comprehensive grade K-12 curriculum in both science and social studies responsive to poverty area learning styles.
2. Create, develop, and test experimental materials for inclusion in the curriculum when comparable materials are not commercially available.
3. Continue to plan and implement programs to help teachers use the newly developed methods and materials most effectively.

### DESCRIPTION

#### Social Studies Team

An analysis of social studies activities during the 1966-67 school year can be described as follows:

##### 1. Primary Grades

An entirely new curriculum framework was constructed by the social studies for grades K - 3 in consultation with all of the primary teachers in the validated schools and a special advisory committee of twenty primary teachers from the non-validated schools. The construction was guided by five principles. These principles assumed:

- a. That the best source of content for a social studies program for children, disadvantaged or not, is in the social science disciplines.

- b. That significant social science concepts can be taught at an early age.
- c. That citizenship values are strengthened by basic social science concepts.
- d. That the great need for inter-cultural and inter-national understanding requires early exposure to a wide variety of peoples and cultures; that the traditional rationale of the expanding community no longer reflects the needs, interests, or experimental backgrounds of most primary students.
- e. That the social studies program must not be postponed until all children are able to read effectively; that significant social science concepts can be taught with the use of multi-media materials.

The structure of the newly developed social studies framework together with a brief description of the materials produced is contained in Table 22.

TABLE 22

FRAMEWORK FOR THE PRIMARY SOCIAL STUDIES PROGRAM

Grades	Old Materials	Grade	New Materials
K, 1	Our School Life in the Family Life on a Farm  Our Pets Animals of the Zoo Circus Days	1	LIVING AT HOME AND SCHOOL - HERE AND AROUND THE WORLD  OUR NATION AND ITS PEOPLE (Our flag, holidays)  LIVING ON OUR EARTH (Oceans, continents, climate, seasons, natural resources, North America, the U.S.)  LIVING WITH FAMILIES MEETING THEIR NEEDS - HERE AND AROUND THE WORLD (Our own, Eskimo, Kenyan, Japanese)
2	Community Helpers  Transportation of People and Things	2	LIVING IN COMMUNITIES  <u>Hartford, our Community</u> (Location, as a marketplace, as a workshop, city services and facilities, rules, voting)  <u>Other Communities</u> (In the United States and in other parts of the world)  OUR NATION AND ITS PEOPLE (Multi-ethnic origins, concept of freedom, Pilgrims, some great Americans)
3	The Clothes We Wear  The Food We Eat	3	LIVING IN CHANGING COMMUNITIES  <u>Case Study: Hartford, a Changing City</u> (Colonial life, changes, city problems, city government, the metropolitan community)

TABLE 22 (continued)

Grades	Old Materials	Grade	New Materials
3	Houses in the Community Communication How People Live and Dress in Other Lands	3	<u>Case Studies of Other Communities</u> (Israel, Holland, India, Brazil)  <u>Case Study of a Non-Changing Community</u> (Bedouins, or Navajos)  OUR NATION AND ITS PEOPLE (Washington, our government, growth of the U.S., the United Nations)

2. Grades 9-12

A new curriculum framework for grades 9 and 10 was also constructed by the curriculum team. This was done in consultation with the three high school social studies departments. A general consensus was held that the traditional civics course was ineffective in the ninth grade, that this civics course undermined the effectiveness of the twelfth grade American Democracy course, and that the tenth grade world history course was a shallow and futile survey with too much content.

The new program is an attempt to teach concepts rather than subjects. It follows these social science concepts through a comparative study of civilizations, which include, where applicable, the government, economy, social controls, class structure, values, and the fine arts. A contrast between the old and the new frameworks can be observed in Table 23.

TABLE 23

FRAMEWORK FOR THE HIGH SCHOOL SOCIAL STUDIES PROGRAM

Grade	Old Material		New Material	
	<u>Academic</u>	<u>Nonacademic</u>	<u>Academic</u>	<u>Nonacademic</u>
9	Ancient History	Civics	World History I	World Civilizations I (Developing nations in Asia, Africa, and Latin America)
10	Modern History	World History	World History II	World Civilization II (in the history of the West)
11	American History	American History World Geography	American History	American History
12	American Democracy	American Democracy	American Democracy	American Democracy Electives

3. Grades 4 - 8

The framework for grades six through eight was established during the 1965-66 year while a study of grades four and five will begin during 1967-68.

During the past year the social studies team was involved in the development of experimental projects and in the testing of materials which included:

1. A unit entitled Economics Can Be Fun, was constructed by the curriculum team and was tested in a second grade class at the Vine Street School. The unit included the writing and production of an original play, "Money Makes the World Go Round."
2. A banking and investment simulation was developed through the organization of an incorporated bank and a retail business financed by the bank. This was also implemented in a second grade at the Vine Street School.
3. A unit on economic choices was constructed by the curriculum team and taught in a third grade at Hooker School.
4. A modified breakfast unit which included economic concepts was taught in a kindergarten at Hooker School.
5. An original story, A Million-Year-Old Idea, was written by a member of the curriculum team and tested in a second grade at Fisher School.

The selection of commercial materials involved:

1. Textbook and supplementary reading materials were collected and analyzed in consultation with faculty committees. Many were recommended for purchase for use in the new programs to be implemented during the coming year.
2. Library materials for the new social studies program were recommended for purchase. The value of the books recommended was approximately \$500.00 for each of the twenty-four elementary schools and approximately \$3,500.00 for each of the three high schools.

3. Media materials, valued at approximately \$65,000.00, were previewed and recommended for purchase.
4. Three major commercial social studies programs were tested in the experimental Annie Fisher School. These were entitled:

Our Working World: Families at Work - SRA  
Books, records, activity books

Earth Home of People - Silver Burdett  
Picture Prints

Families Around the World: Living in Japan -  
Silver Burdett  
Picture Prints

5. Copies of The Negro in American History (District of Columbia Public Schools) were purchased and distributed to all eighth grade and eleventh grade American History teachers in the school system.

In-service training aspects of the program involved:

1. An all-day workshop, conducted on October 27, 1966, to help teachers of grades six, seven, and eight implement the social studies curriculum guides produced the previous year.
2. Members of the curriculum team are presently participating in the planning of an In-Service Day on September 25th, 1967, which will deal with racism and education.

At the secondary level:

1. A unit on aspects of European civilization in the Middle Ages was constructed and taught in a tenth grade class at Weaver High School.

2. A unit on some principles of American government, for use with a programmed unit published by Behavioral Research Laboratories, was constructed. The testing of this unit was postponed until 1967-68 since the books were not delivered in time.
3. A programmed unit, The Free Enterprise System, (Behavioral Research Laboratories) was tested with disadvantaged students at Bulkeley High School.
4. A case study in civil liberties was constructed for the curriculum team and was tested by three teachers at Hartford Public High School.

A massive team publications program is summarized in the following table. It should be noted that the majority of these materials were produced in sufficient quantities to permit piloting in the validated schools.

TABLE 24  
SOCIAL STUDIES PROJECT REPORTS, 1966-67

Title and Description	Gr.	Type Materials	No. Schools <sup>a</sup>	No. Students <sup>a</sup>	No. Hrs. per Student <sup>a</sup>	No. of Items Produced
"Aspects of Medieval Society - Unit"	10	Trans. Filmstrips Student Booklets	1	20	7	0
Multimedia Presentation Unit-Commercial Materials						
"Selected Readings Concerning Values of other Civilization"	9-10	Teacher Reference Booklet	1	20	2	100
"The Law and Your Civil Liberties"	12	Student Booklet	1	150	5	500
Behavioral Research Laboratory Program- "The Free Enterprises System"	12	Commerical Book	1	25	14	
"Hartford Landmarks- Volume II"	3 5 8 11	Teacher Reference Booklet				400
"The Teacher and Basic Media Utilization"		Teacher In-service Booklet				2400
Reading Lists for '65-66 Soc. St. Curr. Guides	6 7 8	Teacher Reference In-service				150
Exercise in Inductive Geographic Reasoning	6 7 8	Teacher Reference In-service				150
"The House You Live In" (Read Aloud)	1	Booklet				2400
"Economics Can Be Fun" Unit based on a play <u>Money Makes the World Go Round</u>	2	Teacher booklet	1	30	15	500

TABLE 24 (CONTINUED)

Title and Description	Gr.	Type Materials	No. Schools <sup>a</sup>	No. Students <sup>a</sup>	No. Hrs. per Student <sup>a</sup>	No. of Items Produced
" <u>You Are The City</u> " 2 Filmstrip Set	2	Filmstrip & guide				24 ea.
"The Story of a City" Final Edition of '65-'66 Pilot "The Story of Hartford"	3	Student booklet				2400
"Early New England Village Life"-Final Edition of '65-'66 Pilot by the same name - 2 Filmstrip Set	3	Filmstrips & Guide				24 ea.
"Early Connecticut Leaders" Multi-media Kit for Inductive Thinking	8	Student booklet teacher guide tape filmstrip trans.  Trans.	2	60	150 5	150 50 50 2 2
More Selected and Intensified Utilization of '65-'66 MOBILE RESOURCE UNIT formerly called <u>Our Country's Foundations</u> now titled <u>American Government Principles</u>	9	Filmstrips Student Books Reference Books Study Prints		25	20	1

<sup>a</sup>Estimated

SCIENCE

The operations of the science team paralleled those of the social studies group. In its first year of operation, the science team produced and piloted the materials which are shown in Table 25.

TABLE 25  
SCIENCE PROJECT REPORTS, 1966-67

Title and Description	Gr.	Type Materials	No. Schools	No. Students	No. Hrs. per Student	No. of Items Prepared
Unit - Rocks and Supplement to Rocks	4	Multimedia	3	90	20	2
Unit - Magnetism	4	Multimedia	4	120	20	2
Unit - Plants and Animals	4	Multimedia	1	30	20	1
Unit - Electricity	5	Multimedia	3	30	20	2
Unit - Oceanography	5	Multimedia	2	30	20	1
Unit - Prevention of Diseases	7-8	Multimedia	1	30	5	1
Unit - Human Systems	7-8	Multimedia	1	30	5	1
Unit - Metric Systems	7-8	Multimedia	1	30	5	1
The Metric Systems	7-8	Pupil Work Booklet				500
Nicotine, Alcohol & Narcotics	5	Pupil Work Booklet				500
Grades 4,5,&6 Curriculum Guide						500

TABLE 25 (continued)

Title and Description	Gr.	Type Materials	No. Schools	No. Students	No. Hrs. per Student	No. of Items Produced
Grades 7 & 8 Curriculum Guide (Two School Year Long Pilot)						
Suggested Demonstrations for 7th & 8th Grade Science Teacher Handbook						150

#### ANALYSIS OF STAFF REQUIREMENTS

The staff requirements for this component can best be described in terms of three inter-related groups. The science and social studies teams were made up of four subject-area teachers on leave from their respective classrooms. These teams were directly responsible for the research and development phases of curriculum development.

To support these teams, a central media-production staff was augmented by the addition of professional and technical personnel. Because of this augmentation, the staff was able to:

1. Produce and distribute of over one million pieces of media to the validated schools. These pieces included:
  - a. Three thousand visuals.
  - b. Thirty-five teacher guides and pamphlets.
  - c. Ninety-six film strips.
2. It should be noted that all of these materials were produced in sufficient quantities for pilot or classroom implementation.

#### EVALUATION

Both the science and the social studies teams continued to make substantial progress toward their operational objectives during the 1956-67 school year. Materials produced and piloted were analyzed by both the classroom teacher and, in many instances, the students involved. Recommendations were processed by each team and, where possible, incorporated in subsequent material revisions.

For the first time this year an attempt was made to measure the direct effects of an improved science curriculum on the attitudes of the pupils involved. Three science units, Electricity, Rocks, and Magnetism, were selected for the study since they represented:

1. A new multi-media approach to learning.
2. Study areas which were generally unfamiliar to the disadvantaged children involved.

Each unit, lasting from four to six weeks in length, was taught by the classroom teacher. At the conclusion of the unit, each child was asked to fill out a research evaluation-developed Self-Rating Scale in terms of the following general question:

How do you feel about yourself after studying this unit?

A comparable Teacher-Pupil-Rating Scale was administered at the same time to the teachers involved in the study. These teachers were also asked to rate each child, thus hopefully answering the question:

How would you rate each pupil's attitudes in terms of the unit studied?

A comparison of ratings by three respondent teachers and eighty-four pupils is summarized in the following table:

TABLE 26

A COMPARISON OF FOURTH GRADE TEACHER AND  
PUPIL ATTITUDINAL RATINGS FOLLOWING COMPLETION OF AN  
EXPERIMENTAL SCIENCE UNIT, MARCH 1967

Rater	No. Pupils Rated	Average %			
		All the time	Most of the time	Only some times	Never
Teacher	55	57	34	9	0
Pupils	84	57	34	8	2

A high degree of rater congruence is evident from the preceding data. Whether the data constitutes a valid evaluation of the unit's effect on the classroom remains a subject for further inquiry.

Perhaps a more meaningful assessment of the project can be obtained from a teacher's comment on a unit evaluation form. Referring to the fifth grade unit on sound, the teacher briefly reported, "It's a teacher's dream."

SUMMARY AND CONCLUSIONS

While it is relatively early to measure the impact of team-developed materials on disadvantaged pupils available, evidence indicates that a myriad of produced materials are:

1. Favorably received by both the teacher, and her pupils.
2. A vehicle for the development of further evaluative techniques relating to pupil changes. This development is a planned part of the program for the 1967-68 school year.

HIGHER HORIZONS 100

(Hartford SADC Project II a)

The 1966-67 school year saw the introduction of a number of modifications to Hartford's ninth grade demonstration center for compensatory services. These modifications were based primarily on an evaluation of the previous year's operations and were designed to overcome several problem areas which had developed.<sup>1</sup> Specific program modifications included:

1. A summer work period. This allowed instructional team members to prepare for the coming year in terms of both the program and last minute changes in enrollments which occurred during the summer months.
2. Grouping students in academic classes by a reading level. This eliminated many of the instructional difficulties which the teachers had attributed to a wide range in achievement encountered during the initial year of project operation.
3. Self-contained homerooms permitted a closer contact between the teachers and the students. Heretofore, the students had been assigned to homerooms at random and as a consequence, the opportunity for the teacher to function as a counselor was severely diminished.
4. The team-controlled detention period was once again continued throughout the year. This policy provided the student was with additional opportunity for counseling and at the same time, eliminated minor office referrals which could become a part of the student's permanent record.

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<sup>1</sup> Evaluation 1965-1966, Project 64-1. (Hartford: Research Evaluation, 1966), pp. 114-120.

5. For the first time, one teacher of mathematics and one of algebra were assigned to the program. This assignment supported the total team concept of instruction in all academic areas. These positions were filled by transfer from within the system and, while funded under the regular Board of Education budget, were considered an integral part of the project staff.
6. With the exception of the mathematics teachers, only one staff replacement was required. This involved a new speech teacher, hired in September 1966, and assigned to the team for the entire 1966-67 instructional period.
7. A comparable control group was established at Weaver High School. So far as possible, comparisons of the experimental group data with that of the control group were used to answer the series of evaluative questions contained in the following pages.

## PART I

### CHANGES IN MEASURED INTELLIGENCE

#### Problem

The testing literature has long recognized the close association between a mastery of language skills and the results obtained by students taking group intelligence tests.<sup>1</sup> When these tests are administered to poverty area children, a lack of language skill facility is frequently reflected in lower test scores and in test data which routinely requires an intelligent professional inquiry into what lies behind the obtained score rather than what the score means in terms of the typical, middle class, non-disadvantaged school population.

Despite their many limitations, however, group intelligence tests are still one of the more important evaluative and prognostic tools available to the educator today. Used with caution and with an awareness of the inherent limitations, test scores can continue to assist the teacher in a better understanding of each individual in the class.<sup>2</sup>

Without minimizing the language-oriented aspects of group testing, it was hypothesized that a program of intensive language instruction would eventually result in higher recorded intelligence test scores.<sup>3</sup> This program, it was felt, would produce test data which might be used to assess individual progress in terms of each student's capacity to function in a traditional school situation; a situation which would surely be encountered if the students were to proceed to a higher level of education or training.<sup>4</sup>

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<sup>1</sup> Martin Deutsch et al., "Guidelines for Testing Minority Group Children," The Journal of Social Issues, XX (April, 1964), pp. 127-145.

<sup>2</sup> Ibid., p. 143.

<sup>3</sup> Hartford School Project II, 1966-67, pp. 5-8.

<sup>4</sup> Anne Anastosi, "Some Implications of Cultural Factors for Test Construction," Testing Problems in Perspective, ed. Anne Anastosi (Washington: American Council on Education, 1966), pp. 453-457.

Design

As part of a city-wide testing program, both the verbal and non-verbal parts of the Lorge-Thorndike Intelligence Tests (Level 4, Form A, 1954 edition) were administered to all eighth graders in May 1965. The data obtained was used as one available criterion for the placement of students in both the experimental and control groups for the purpose of this study.

In May 1967, the same test was again administered to both groups. Mean scores and standard deviations were calculated and the significance of change was assessed using a test of mean difference at the .05 level of confidence. This data is reflected in the following two tables.

TABLE 27

COMPARISON OF MEAN VERBAL INTELLIGENCE SCORES BETWEEN HIGHER HORIZONS 100 AND CONTROL GROUP STUDENTS, MAY 1966-JUNE 1967

	N	May 1966		N	June 1967		Mean Diff.	Significance
		Mean I.Q.	S.D.		Mean I.Q.	S.D.		
Experimental	113	94.4	6.94	90	98.6	9.09	4.2	.62
Control	83	94.7	8.89	66	92.2	9.69	1.5	.97

From the preceding table it can be observed that the mean verbal I.Q. scores showed a significant gain for the experimental group while the mean scores for the control group evidenced no appreciable change during the period of inquiry.

A similar compilation of nonverbal test data is reported in Table 28.

TABLE 28

COMPARISON OF MEAN NONVERBAL INTELLIGENCE SCORES BETWEEN HIGHER HORIZONS 100

	N	May 1966			N	June 1967			Mean Diff.	Significance
		Mean	I.Q.	S.D.		Mean	I.Q.	S.D.		
Experimental	113	101.2	10.75	91	105.7	11.70	4.5		2.83	
Control	82	99.1	10.19	66	99.5	11.53	.4		.22	

Here again significant mean gains were recorded for the Higher Horizons 100 group while no appreciable changes in the scores of the control group students were recorded during the twenty-month interval between testings.

Conclusions and Summary

From the data presented it can be concluded that significant mean gains in both verbal and nonverbal measured intelligence were made by the experimental group when tested with the Lorge-Thorndike Intelligence Tests following one year of intensive instruction.

## PART 2

### GROWTH IN READING ACHIEVEMENT

#### Problem

What are the effects of an intensive instructional program on reading achievement?

#### Design

The purpose of this investigation was to assess changes in reading achievement following one school year of intensive reading instruction. To assess these changes, The Iowa Silent Reading Tests (Form BM and AM, Revised New Editions) were administered to both the experimental and control groups in the fall of 1966 and again the following spring. In addition, test scores from the Metropolitan Achievement Tests (Advanced battery, 1960 Edition) were routinely obtained during the springs of both 1966 and 1967 and consequently, and both the "Reading" and "Word Knowledge" scores were utilized in this investigation.

Means and standard deviation were calculated for the several tests and a test of mean difference at the .05 level of confidence was applied to the data. The results of these calculations appear on the following pages.

TABLE 29

COMPARISON OF IOWA SILENT READING MEAN SCORES, FALL 1966-SPRING 1967<sup>a</sup>

	N	Fall 1966		N	Spring 1967		Mean Diff.	Significance
		Mean Score	S.D.		Mean Score	S.D.		
Experimental	99	140.8	15.90	91	155.3	9.59	14.5	7.68
Control	77	143.4	11.83		b	b	b	b

<sup>a</sup>The experimental group was tested in September 1966 and in May 1967 while the Weaver control group received the tests in November and May of the same year.

<sup>b</sup>Test data has not been received from the scoring service to date.

While Table 29 indicates a significant gain in reading achievement at the .05 level of confidence, further conclusions should not be drawn at this time until control group data can be analyzed. This analysis will be the subject of a continued investigation upon the completion of test processing by the publisher.

Table 30 present further evidence of reading gains. Note that both the total "Reading" and "Word Knowledge" gains are significant. Here again control group data is not available and consequently the reader is cautioned against drawing premature conclusions at this time.

TABLE 30

COMPARISON OF SELECTED METROPOLITAN ACHIEVEMENT TEST MEAN GRADE EQUIVALENT SCORES MAY 1966-MAY 1967<sup>a</sup>

	N	May 1965		N	May 1967		Mean Diff.	Significance
		Mean G.E.	S.D.		Mean G.E.	S.D.		
Word Knowledge	95	5.0	3.86	93	7.8	1.97	2.8	6.29
	Control	a	a	67	7.3	1.94	a	
Reading	95	4.5	4.33	93	7.6	1.81	3.1	6.44
	Control	a	a	67	7.2	1.84	a	

<sup>a</sup>Not available.

### Conclusions and Summary

Available test data indicates that the experimental group made significant growth in reading achievement when the gains were measured by the Iowa Silent Reading Tests and the "Word Knowledge" and "Reading" parts of the Metropolitan Achievement Tests. These gains followed nine months of intensive language instruction.

A comparison of the experimental group reading scores with those of the control group was prohibited because of delays in test scoring. This comparison will, however, be the subject of a subsequent investigation.

### PART 3

#### Problem

Termed originally an intensive language project, the Higher Horizons 100 program not only focused instructional attention on reading and speech but considered the development of writing skills as well. To investigate the effects of this phase of instruction, the following procedures were developed.

#### Design

The SRA Writing Skills Test (Form A, 1961 Edition), was initially administered to students in both the control and experimental groups in the Fall of 1966, with a second administration taking place in May 1967.

Means and standard deviations were calculated and the results compared using a test of mean difference at the .05 level of confidence. Since the data was available, calculations were developed separately for both boys and girls. The results of these calculations appear in Table 31, which follows.

TABLE 31

COMPARISON OF SRA WRITING SKILL PERCENTILE SCORES BETWEEN HIGHER HORIZONS 100 AND CONTROL GROUP STUDENTS, FALL 1966-SPRING 1967<sup>a</sup>

	N	Fall 1966		N	Spring 1967		Mean %ile Diff.	Significance
		Mean %ile	S.D.		Mean %ile	S.D.		
<b>Boys</b>								
Experimental	46	20.5	17.24	43	38.7	22.78	18.2	4.23
Control	31	28.7	18.89		b	b	b	
<b>Girls</b>								
Experimental	41	18.9	14.28	37	38.1	21.06	19.2	4.66
Control	41	17.8	14.37		b	b	b	

<sup>a</sup>Fall testing for the experimental group took place in September 1966 while the control group was tested in November. The spring testing for both groups was in May 1967.

<sup>b</sup>Not available.

Significant gains were recorded for the experimental group at the .05 level of confidence. Unfortunately, post test control group data had not arrived from the publisher and further comparisons could not be made at this time.

#### Conclusions and Summary

Following nine months of intensive language instruction, the Higher Horizons 100 group produced significant changes in writing skill achievement when these skills were measured by the SRA Writing Skills Test at both the beginning and end of the instructional period. Although comparisons with control group data were contemplated, a delay in test processing will require that this phase of the investigation be postponed until a later date.

## PART 4

### ACHIEVEMENT TEST GAINS

#### Problem

It was expected that nine months of intensive compensatory services would be reflected in positive changes on group achievement scores. This expectation was based upon three assumptions:

1. The intensive language instruction would provide the students with the skills necessary to adequately cope with language-oriented group tests.
2. The configuration of the total program would provide the necessary motivation for students to honestly attempt to master the testing situation.
3. The development of computational skills would be included in the instructional program.

#### Design

Both the experimental and control groups were tested in the fall and spring of the 1966-67 school year with the Metropolitan Achievement Tests (Advanced Battery, 1947 Edition). Both the experimental group and control groups received the initial testing in May 1966 and the second test during June of the following year.

The table which follows contains a compilation of the data obtained from both the pre and the post testing. Note that only the "Computation" and "Language" sections of the test are included, since "Reading" and "Word Knowledge" were treated separately in Part 2 of this report (Significant gains were reported in both areas).

Once again mean grade equivalent scores and standard deviations were calculated and compared using a test of mean difference at the .05 level of confidence.

TABLE 32

COMPARISON OF SELECTED MEAN GRADE EQUIVALENT TEST SCORES, MAY 1966-JUNE 1967

	N	May 1966		N	June 1967		Mean Diff.	Significance
		Mean Score	S.D.		Mean Score	S.D.		
Language								
Experimental		a		88	8.6	2.00		
Control		a		b	b	b		
Spelling								
Experimental		a		91	9.1	1.55		
Control		a		b	b	b		
Arith. Comp.								
Experimental	96	7.1	1.74	93	7.8	1.43	.7	3.070
Control		c		67	7.3	1.09		

<sup>a</sup>Not given as part of the city-wide testing program.

<sup>b</sup>This portion of the test was not given to the control group because of time limitations.

<sup>c</sup>Given but not available at this time.

The data supplied in Table 32, when combined with the data contained in Table 30, shows significant gains for the experimental group in the areas of achievement which were measured. The unavailability of control data precludes further comparative investigations at this time.

#### Conclusion and Summary

From the limited data available, it can be concluded that mean grade equivalent gains in "Reading," "Word Knowledge" and "Arithmetic Computation" were significant for the experimental group following nine months of intensive instruction.

## PART 5

### PERSONALITY CHANGES

#### Problem

The initial development of the Higher Horizons 100 program was largely predicated on the dual assumptions that both school and vocational success require that the student (1) master a number of basic skills and (2), that he utilize these skills in an acceptable manner. To provide for this utilization it was felt necessary that each student:

1. Develop an adequate functional self-concept.
2. Meet the basic educational and vocational requirements of his school and society as a whole.
3. Function as both an individual and as a member of a group.

How well the typical Higher Horizons 100 student has been able to master these goals is the subject of this inquiry.

#### Design

This investigation was expanded from the previous year's study to consider three, rather than two measures of change.

1. The use of the California Test of Personality (1953 Revision, Secondary Level) was planned as a semi-objective self-evaluation. The instrument was selected on the basis of both content and its language suitability for the group being tested. The machine scoring capabilities of the test also improved the test's suitability for both a pre and post test admission.

2. Teachers were asked to rate each student at both the beginning and at the close of the school year. This rating, on a locally developed Personality Second Sheet, was designed to answer questions regarding individual adjustments to the requirements of a school society, as seen by the classroom teacher.
3. The students were also given the opportunity to rate themselves in response to three areas at the end of the school year:
- "How well do I accept the responsibilities and requirements of my school?"
  - "What changes have occurred in my attitudes toward school during the past year?"
  - "What do I think of my responsibilities toward school?"

Initially, the California Test of Personality was administered to each pupil who had been selected for possible placement in the program. These pupils were tested in their regular eighth grade classes and the tests were sent out for processing. Unfortunately, a wide discrepancy in the obtained results, coupled with a number of composite rather than mean scores reported, tended to invalidate the entire pre-testing, and consequently, the significance of gains reported in Table 33 should be discounted.

TABLE 33  
COMPARISON OF CALIFORNIA TEST OF PERSONALITY PERCENTILE SCORES,  
JUNE 1966-JUNE 1967

	N	June 1966		N	June 1967		Mean %ile Diff.	Significance
		Mean %ile	S.D.		Mean %ile	S.D.		
Personal Adjustment Experimental	81	10.6	11.86	77	40.9	27.4	+30.3	8.94
Social Adjustment Experimental	80	10.6	11.23	77	31.3	23.6	+13.0	4.38

Table 34 contains the results of the teachers' ratings of pupil adjustment, both during the fall of 1966 and following nine months of exposure to the instructional program. A weighted score was given to each of the twelve items on the scale and mean scores for the boys and girls were calculated separately. A comparison of these mean scores is contained below.

TABLE 34  
COMPARISON OF MEAN TEACHER RATINGS, FALL 1966-SPRING 1967

	N	Fall 1966 Mean Rating	N	Spring 1967 Mean Rating	Change
Boys					
Experimental	52	3.50	51	2.91	-.59
Control	29	3.36		a	a
Girls					
Experimental	46	3.97	41	3.28	-.69
Control		3.25		a	a

<sup>a</sup>Data was not available at the time this report was written.

Once again, the available evidence is not sufficient to draw valid conclusions regarding personality changes in terms of the rated variables. Consequently, the data presented should be considered for information only.

While a number of additional studies into the always-amorphic realm of personality change were attempted, these attempts proved futile. First a structured autobiographic inventory, The Biographical Inventory for Students, was administered to the experimental group. This inventory proved to be extremely sensitive and was rejected by both the instructional team and the Weaver administration for future testings.

Next, the Self-Rating Scale was administered to assess the group's collective attitudes toward school-oriented responsibilities. Here again, post-test data was not furnished and thus attendant conclusions were eliminated. A comparison of the available pre-test data is listed in Table 35, with the comparisons intended for information, only.

TABLE 35

A PARTIAL COMPARISON OF PUPIL RATED ATTITUDES, FALL 1966

	N	Fall 1966 Mean Rating <sup>a</sup>
Boys		
Experimental	40	1.80
Control	31	2.00
Girls		
Experimental	43	1.74
Control	41	1.77

<sup>a</sup>Ratings refer to the following schema and were listed on an item continuum.

- 1 - All the time
- 2 - Most of the time
- 3 - Only some time
- 4 - Never

A second instrument, termed the Pupil Self-Rating Scale, and utilized during the previous school year, was administered to the experimental group.<sup>1</sup> This instrument, a "before" and "after" scale, attempted to investigate the students feelings toward progress made in the development of school attitudes during the year.

A comparison of the mean ratings are contained in Table 36.

<sup>1</sup> Evaluation 1965-1966, pp. 143-144.

TABLE 36

COMPARISON OF PUPIL-RATED GAINS IN DEVELOPING BETTER SCHOOL ATTITUDES,  
SCHOOL YEAR 1966-1967

	N	"Them" Mean	"Now" Mean	Mean Diff.
Boys	36	3.63	3.82	.19
Girls	28	3.63	4.03	.41

Conclusion and Summary

For the second consecutive year, investigation into personality changes resulting from the Higher Horizons 100 instructional program have proved fruitless. Despite this lack of evidence, subjective comments from team members continue to stress that the students are changing, and that the changes are meaningful. In terms of measured personality changes an oft-quoted television commercial seems appropriate at this time, "...we don't know, but we must be doing something right."

## SUMMARY AND CONCLUSIONS

For the second consecutive year, a ninth grade demonstration center in compensatory education continued to supply approximately one-hundred inner city youngsters with an articulated program of intensive instruction, cultural activities, and guidance.

Among the findings of the partial evaluation of the 1966-67 program year were the following:

1. Problems regarding organizational patterns were largely resolved on the basis of the first year's experience. This was accomplished prior to the onset of the school year.
2. Significant gains in both verbal and nonverbal measured intelligence were made by the experimental group, while control group gains in these areas were minimal.
3. Gains in reading, writing and computational achievement were significant at the .05 level. A delay in the scoring of tests, however, prohibited further comparisons with the control group.
4. Available attitude and personality data continues to be inconclusive, despite the many positive indications of change cited by the involved staff.
5. The gathering and processing of test data continues to present many problems. This was caused, in part, by the lack of an available guidance coordinator during the past year. It is expected that this position will be filled in the immediate future.
6. While no attendance, failure, or disciplinary referral studies have been attempted, these will be the subject of further inquiry in the late fall of 1967. Subjective teacher comments again indicate that many positive changes in these areas have been

accomplished, and thus the study is expected to be a fruitful one. From the total evidence available, it can be concluded that the 1966-67 Higher Horizons 100 project was successful in terms of the stated instructional objectives for the second consecutive year.

## SPEECH AND LANGUAGE IMPROVEMENT PROGRAM

(Hartford SADC Project III)

In September 1966, a speech and language improvement program was put into operation in the first grades of twelve of the thirteen elementary schools which had qualified for assistance under the State Act for Disadvantaged Children. This operation followed a full-year of program development which included a three day summer workshop for the participating first grade teachers, frequent staff meetings with consultants, and the piloting of both materials and instructional techniques in typical classroom settings.

The program, itself, was organized around a syllabus, The Child Speaks, by Dr. Margaret C. Byrne, University of Kansas consultant to the project. Using the syllabus as a guide, the classroom teacher was provided with the specific lessons and materials necessary to work effectively with pupils for periods ranging from twenty to thirty minutes each day. It was hoped that the training provided the pupils would result in:

1. The development of improved listening skills involving both comprehension and auditory discrimination.
2. More adequate patterns of articulation and grammar usage.
3. The building of a series of concepts and the development of a vocabulary to express them.
4. More positive attitudes toward communication.
5. An improved positive self-concept.

The program is presently supported by the services of a curriculum staff which includes one trained clinician, one elementary teacher, and a secretary. A third teaching position was authorized but this was not filled during the 1966-67 school year because of the continuing nation-wide shortage of qualified

speech personnel. In addition to the full-time staff, the consultant services of both Dr. Byrne and Dr. Mary S. Farquhar were made available to the project.

In order to evaluate the effectiveness of the project, a carefully designed testing program was developed. This testing program utilized a control group at Clark Street, the thirteenth validated school, and included both pre and post testing. Instruments included:

1. The Templin-Darley Screening and Diagnostic Tests of Articulation (1960 Edition).
2. The Peabody Picture Vocabulary Test (1959 Edition).
3. Three sections of the Illinois Test of Psycholinguistic Abilities (Auditory Vocal Automatic, Association, and Sequencing).
4. The Farquhar Spontaneous Picture Articulation Test.
5. Taped language samples. The analysis of these samples and subsequent tapings are scheduled for the 1967-68 school year. Consequently this data is not included in this report.

To measure progress in articulation, both the Templin-Darley and the Farquhar Spontaneous Picture Articulation Test were administered to both the control and experimental groups in the late spring of 1966 and 1967. Since both instruments required individualized administration, testers were required to standardize their testing procedures. For the initial testing the degree of agreement ranged from .91 to .96. With a change in the testing personnel during the second year, a re-standardization of administration resulted in a correlation of .63. While this correlation was deemed adequate for continued testing, it deviated substantially for the initial figures and consequently this deviation should be taken into consideration in the analysis of the post test data which follows. Note that means, ranges, and standard deviations have been calculated, and the significance assessed using a test of mean difference at the .05 level of confidence.

TABLE 37

COMPARISON OF CHANGES IN ARTICULATION SKILLS AS MEASURED BY THE TEMPLIN-DARLEY  
AND FARQUHAR SCREENING TESTS, MAY 1966-MAY 1967

	N	May 1966			N	May 1967			Mean Diff.	Significance
		Mean Score	Range	S.D.		Mean Score	Range	S.D.		
Templin-Darley										
Boys										
Experimental	63	39.8	24-50	7.12	34	40.7	12-49	8.67	.9	.52
Control	28	38.7	19-48	8.07	13	44.1	39-49	3.17	5.4	3.07
Girls										
Experimental	46	39.4	7-50	8.68	29	42.4	9-49	7.91	3.0	1.54
Control	20	38.7	11-49	9.40	11	43.4	32-50	5.78	4.7	1.72
Farquhar										
Boys										
Experimental	67	28.2	8-55	6.70	34	35.6	16-37	4.37	7.4	6.42
Control	34	28.6	14-36	5.74	13	35.5	34-39	1.39	8.9	8.42
Girls										
Experimental	48	27.4	4-36	5.82	29	32.2	5-37	5.61	4.8	3.59
Control	24	28.1	17-36	9.19	11	34.4	29-38	2.69	10.3	5.04

Table 37 provides the reader with a number of observations. When the children were tested individually:

1. All the recorded mean articulation gains, with the exceptions of those recorded by the Templin-Darley for the experimental boys and girls, and for the control girls were significant at the stated level.
2. The recorded mean gains were greater for the control groups than for the experimental groups.

While no conclusions regarding the articulation data have been drawn as yet, it could be hypothesized that the youth of the subjects - kindergarten and grade one - could have some bearing on the obtained results and on the final analysis of the data.

To estimate verbal intelligence, the Peabody Picture Vocabulary Test was also administered to both groups at the time of articulation testing. Data was processed in the same manner as that of the Templin-Darley and Farguhar, with the results appearing below.

TABLE 38  
CHANGES IN VERBAL INTELLIGENCE, SPRING 1966-SPRING 1967

	N	Spring 1966			N	Spring 1967			Mean Diff.	Significance
		Mean Score	Range	S.D.		Mean Score	Range	S.D.		
<b>Boys</b>										
Experimental	69	42.9	6-59	12.75	36	58.0	43-71	5.80	15.1	8.33
Control	34	49.0	27-74	10.04	15	60.5	55-66	6.47	11.5	4.79
<b>Girls</b>										
Experimental	49	40.5	9-35	11.00	31	53.6	29-65	7.40	13.1	6.37
Control	25	45.2	10-62	10-62	13	55.3	37-64	7.12	10.1	3.16

The data contained in Table 38 clearly indicates a substantially greater pattern of growth in the area of functional verbal intelligence for the children who had received speech improvement training than for the control group youngsters. Note that the post test sample was diminished by the mobility prevalent in the validated schools. It is important to note that the Peabody testing was done by the school psychological examiners while the Templin-Darley and Farguhar tests were administered by members of the supportive team.

To assess the areas of psycholinguistic discrepancies and consistancies, a portion of the Illinois Test of Psycholinguistic Abilities (ITPA) was employed. Three of the sub-tests, designed to measure the use of verbal analogies, grammatical structures, and auditory reproductions from memory, were employed as further measures of functional speech. This sub-test data follows in Tables 39-41.

TABLE 39

COMPARISON OF MEAN ITPA VERBAL ANALOGY SCORES, SPRING 1966-SPRING 1967

	N	Spring 1966			N	Spring 1967			Mean Diff.	Significance
		Mean Score	Range	S.D.		Mean Score	Range	S.D.		
<b>Boys</b>										
Experimental	69	6.3	0-15	3.32	36	10.3	3-18	3.87	4.0	5.27
Control	34	9.4	3-16	3.52	15	12.4	8-19	4.67	3.0	2.23
<b>Girls</b>										
Experimental	50	5.4	0-13	4.57	31	10.1	4-17	3.37	4.7	5.31
Control	25	7.8	3-17	3.60	13	11.0	2-16	4.32	3.2	2.29

TABLE 40

COMPARISON OF ITPA GRAMMATICAL STRUCTURE SCORES, SPRING 1966-SPRING 1967

	N	Spring 1966			N	Spring 1967			Mean Diff.	Significance
		Mean Score	Range	S.D.		Mean Score	Range	S.D.		
<b>Boys</b>										
Experimental	69	11.3	1-20	9.11	36	15.8	8-21	2.88	4.5	3.76
Control	34	13.8	6-24	4.23	15	17.7	15.21	1.62	3.9	4.66
<b>Girls</b>										
Experimental	50	11.2	1-19	4.63	31	16.9	12.21	2.30	5.7	7.36
Control	25	12.0	0-20	4.43	13	16.5	5.21	4.77	4.5	2.83

TABLE 41

COMPARISON OF ITPA AUDITORY REPRODUCTION SCORES, SPRING 1966-SPRING 1967

	N	Spring 1966			N	Spring 1967			Mean Diff.	Significance
		Mean Score	Range	S.D.		Mean Score	Range	S.D.		
<b>Boys</b>										
Experimental	69	18.5	0-36	6.12	36	21.2	14-36	4.76	2.7	2.49
Control	34	20.1	11-30	4.95	15	25.5	16-36	5.10	5.4	3.45
<b>Girls</b>										
Experimental	50	20.6	9-35	6.13	36	20.8	13.54	10.93	.2	.10
Control	25	19.0	10-33	4.74	13	24.0	19-33	4.06	5.0	3.40

ITPA data contained in Tables 39-41, points out the following:

1. Both the boys and the girls in the experimental group made substantially larger gains in the use of verbal analogues and grammatical structure than did the control group children.
2. The control group youngsters seemed to improve appreciably in the reproduction of auditory stimuli, in contrast to lesser gains for the experimental boys and minimal gains for the experimental girls.
3. The largest area of gains involved the use of language, while the smallest gain was in the area of sound reproduction.

As part of the total project assessment, a Teacher Evaluation Form was given to each of the ~~thirty~~<sup>seventy</sup> seven first grade teachers involved in the project. These teachers were asked to complete the form at the end of each instructional unit in The Child Speaks, and submit it to the project coordinator. Teachers submitted a total of 593 evaluations ranging from 0 to 21 units, with an average submission rate of 15 unit evaluations per teacher. A synopsis of these unit evaluations is contained below.

TABLE 42

TABULATION OF UNIT EVALUATIONS, SCHOOL YEAR 1966-1967

Question	Number of Responses						
	Yes	No	Perhaps	To All	Majority	Few	None
Is the concept of identifying speech sounds clear to the children?	381	11		80	298	51	1
Is the concept of auditory discrimination clear to the children?	410	11		83	313	41	0
Is the sound being taught used correctly by the children?	362	11		55	152	29	0
Have you noted any improvement in the children in the use of pronouns?	259	81		0	132	163	3
Have you noted any improvement in the children in the use of verb forms?	256	91		4	125	177	1
How many of the children are participating in the lessons?				202	245	29	0
How many of the children seem to be understanding the lessons?				110	309	37	1
Do you feel that the speech improvement lessons have stimulated the children to talk more?	241	26	211				
Do you feel that the children are participating more willingly in verbal class activities?	256	15	176				
Do you find the toys, books, and materials hold the children's interest?	428	0					

Even a cursory examination of the teacher responses indicates that:

1. Teachers generally felt that the instructional units were effective in working with first grade children.
2. The children apparently profited from the instruction. As could be expected, the proper usage of pronouns and verbs constituted the areas of major instructional difficulty.

Comments submitted with the Teacher Evaluation Forms further indicated the materials which were most effective in working with children. These included:

1. Pictures from the Peabody Language Development Kit (Level I).
2. Flannel board materials.
3. Mirrors
4. Visual and motoric activities and materials.

Judged least effective were:

1. Stories without pictures or the opportunity for an active pupil participation.
2. Stories which had inappropriate backgrounds or interest features.
3. Bryngelson-Glaspy Picture Cards. These cards were too small for large group instruction.

To evaluate the three-day pre-service workshop conducted during the 1966 summer, the following questions were asked:

1. As a first grade teacher about to initiate the speech improvement curriculum, what three aspects of the workshop were most meaningful or helpful?
2. What three aspects seemed to be least meaningful or helpful?
3. What are some things that you would have thought to be helpful, but were not included in the workshop?

A tabulation of teacher responses to these questions is summarized in Table 43.

TABLE 43

TEACHER EVALUATION OF A SPEECH IMPROVEMENT WORKSHOP, SUMMER 1966

Question	Response	No. Responses
As a first grade teacher about to initiate the speech improvement curriculum, what three aspects of the workshop were most meaningful or helpful?	Group Meetings	5
	Evaluation of tapes	6
	Practice with materials (including tape recorder)	7
	Dr. Marge's presentation	14
	Dr. Byrne's presentations	
	lectures	15
	structured discussions	9
	Sp. & Lang. Prob. Cul. Dis.	3
	Inc. into other aspects curr.	2
	Goals and aims of program	3
	grammar	1
	demonstration with children	48
	Demonstration of materials	10
	General statement of worth of workshop	3
	Comments regarding clarity, conciseness of <u>The Child Speaks</u>	5
What three aspects seemed to be <u>least</u> meaningful or helpful?	Demonstration of and practice with AV materials	11
	Previewing filmstrip	6
	Dr. Marge's presentation	10

TABLE 13 (con't.)

TEACHER EVALUATION OF A SPEECH IMPROVEMENT WORKSHOP, SUMMER 1966

Question	Response	No. Responses
	Lectures	3
	Inc. Sp. Imp. other aspects of curriculum	2
	Perspective: Speech Improvement (Dr. Farquhar)	2
	Group Meetings	5
	Time spent on Monday AM	5
	Evaluation taped material	1
What are some things that you would have thought to be help- ful, but were not included in the workshop?	Demonstrations:  with larger groups of children	4
	with children from various socioeconomic levels	3
	with non-English speaking	4
	of grammar lesson	1
	more detailed demonstration with children (whole unit)	8
	using tape recorders with children	6
	More direct teacher participation	8
	More small group meetings	3
	AV training in more detail	2
	More emphasis on work concept, vocabulary development, and grammar	3
	More detailed plans for how to use materials and when to use them in the classroom	4

TABLE 43 (con't.)

TEACHER EVALUATION OF A SPEECH IMPROVEMENT WORKSHOP, SUMMER 1966

Question	Response	No. Responses
	How to deal with speech problems not referred to therapist	1
	How to recognize problems in children's speech	1
	How to evaluate child's speech improvement	1
	Tape record the demonstrations with the children and replay for small group consideration	1
	Clarify sequence of lessons or how all of the materials fit together	1

## SUMMARY AND CONCLUSIONS

Following a year of program development, a speech and language improvement program was placed in operation in the first grades of twelve of Hartford's thirteen validated elementary schools. The classroom teachers in these schools were provided with a guide syllabus and with the training necessary for the use of specific lessons and materials which were developed to provide children with more effective patterns of speech.

Using the thirteenth validated school as a control group, a program of pre and post testing was inaugurated and comparisons made. From these comparisons, it can initially be concluded that:

1. Tested articulation gains, while generally statistically significant at the .05 level of confidence, were somewhat less than that evidenced by the control group. Because of the youth of the tested population and the difficulties encountered in the training of testers, it was suggested that the formulation of any conclusions based on the available data be postponed until further investigations can be made.
2. The experimental group evidenced substantially more gains in verbal intelligence than did the control group, with the boys tending to obtain the higher scores.
3. Both the experimental boys and girls showed marked gains in verbal analysis, in comparison with the control group youngsters.
4. In the use of grammatical structure, the experimental group made the largest mean gains.
5. The smallest gains were made in the area of auditory reproduction. These gains were surpassed by both the control boys and the girls.
6. Teachers felt that the instructional materials were effective in working with first graders. They also felt that the children had profited from the speech instruction.

While it should be emphasized that the preceding conclusions were based on limited evidence, obtained during the first year of program operation, it appears that the gains cited were generally substantial. From this evaluative beginning, Hartford's unique approach to speech and language improvement is expected to produce additional evidence of pupil change in the not too distant future.

READING IMPROVEMENT  
(Hartford SADC Project IV)

DESCRIPTION

For the second consecutive year, a three-pronged attack on reading disabilities was conducted in Hartford's sixteen validated schools.<sup>1</sup> This attack involved:

1. The continued employment and assignment of five and one-half reading specialists to the schools with the highest proportions of reading disabilities.
2. Small group instruction by three Intensive Reading Instructional Teams, commonly called IRIT's.
3. The use of a reading clinic to provide the poorest readers with intensive one-to-one instructional services.

ANALYSIS OF STAFF REQUIREMENTS

With the exception of a one-half position, in the expanded program all reading vacancies were filled during the 1966-67 school year. A summary of the total positions allocated to the project is shown in Table 44.

TABLE 44  
SADC READING POSITIONS 1966-1967

Position	Number
Coordinator	1
IRIT	9
Clinic	4
Expanded Reading Program	5½
Secretarial Staff	5

<sup>1</sup> Evaluation 1965-1966 (Hartford: Research Evaluation, 1966), pp. 179-232. A detailed description of the total program, objectives, and activities form can be found in the cited reference. This forms a basis for the current year's report and should be consulted for further information.

EVALUATION

While the overall operations of the project followed the pattern established during the previous year, a number of particularly successful activities were reported. A description of these activities and the reported problem areas is contained in the evaluative discussion which follows.

## EXPANDED READING SERVICES

### DESCRIPTION AND EVALUATION

The specific purpose of this component was to provide badly needed reading specialists to eight of the validated elementary schools. Of the six positions authorized, three were filled by September, 1966 and two and one-half more by the first of the following year. With these positions, it was possible to provide:

1. Six of the eight validated schools with specialized reading personnel. These personnel were able, in turn, to:

- a. Establish a remedial program for pupils who were retarded in reading.
- b. Assist teachers in the grouping of children for reading.

This assistance also included help in the selection of the proper materials for each ability group.

- c. Identify pupils with reading difficulties and recommend suitable corrective techniques to the teacher.
- d. Assist parents in the selection and use of materials needed to strengthen reading skills, while at the same time fostering the child's interest in independent reading.

In terms of total reading improvement, added specialist services have meant an improvement in the over-all program for the validated schools.

This improved program can be summarized in part, by data extracted from a Program Evaluation form distributed to a sample of twelve teachers. These teachers indicated that the services of a specialist, when utilized to correct reading disabilities, were generally effective in:

1. Helping children to achieve.
2. Providing the individual child with necessary remedial assistance.

### INTENSIVE READING INSTRUCTIONAL TEAMS

During the past year, three Intensive Reading Instructional Teams provided approximately 469 fourth, fifth, and sixth grade students with intensive small-group reading instruction. These students come from eight validated schools and were instructed for periods ranging from nine to ten weeks in length.

The program, itself, continued to use a departmentalized structure and a team approach to reading. Teachers worked with the pupils for entire mornings in three areas of reading. These areas included: (1) the basal reading program, which stressed vocabulary and comprehension development; (2) the phonics program, including instruction in word attack skills; and (3) the individualized reading program, designed to develop an appreciation and enjoyment of literature and the library. These three areas were coordinated and pupils received daily instruction in each area for one hour.

A number of IRIT activities were reported as being particularly successful in working with children. These included:

1. An IRIT open house. This provided parents with an understanding of the program and emphasized the necessity for continued parent-teacher cooperation in helping the individual children.
2. The use of motivational materials to build the pupil's self-concept was emphasized. These materials included a weekly newspaper, skills booklets, and the use of scholastic awards. These procedures followed a pattern which was particularly successful last year.
3. A lending library of paper-back books was established and used to promote wider reading. The library was also a subtle way of getting reading material into the homes as a leisure activity.

4. "Flees-Zees", a "Dr. Seuss" type workbook was written by an IRIT member to make the difficult concept of homonyms easy and fun to understand. This workbook is an outgrowth of the learning activities in an IRIT, and is expected to be ready for distribution in September, 1967.
5. IRIT teams served as observation centers for teachers in the validated schools. Teachers received assistance in the use of methods and techniques deemed necessary to promote optional growth in reading in their classrooms.
6. Specific Language Master techniques were developed to meet the needs of Hartford's children.
7. The improvement of oral expression was fostered through choral speaking, a puppet theater, and the dramatization of both fables and scientific facts.

#### EVALUATION

To measure the total instructional effects of the IRIT program, a number of evaluative studies were undertaken. These studies considered:

1. Changes in reading achievement.
2. Changes in measured intelligence.
3. Assessments of the IRIT program by the classroom teacher, the parent, and the pupil.
4. Follow-up inquiries into prolonged reading achievement.

A brief discussion of each of these studies is contained in the following pages.

PART I

ANALYSIS OF IRIT READING ACHIEVEMENT GAINS

Problem

What are the effects of IRIT instruction on reading achievement?

Design

The 341 pupils included in this study approximated 73 per cent of the 469 children who received IRIT instruction during the 1966-1967 school year, and represented eight of the thirteen schools eligible for services under the State Act for Disadvantaged Children.

Each of the selected groups of children was tested at the beginning of the nine or ten week instructional cycle with Form W of The California Reading Achievement Test (1957 Edition) and again, with Form X, during the last week of instruction.

Mean scores were determined and gains recorded for the vocabulary, comprehension, and total reading scores. While no individual tests of significance were calculated, the majority of the gains were observed to equal or surpass those recorded during the previous year.<sup>1</sup> This data is shown in Table 45 to 47, which follow.

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<sup>1</sup> Ibid., p. 204-207

TABLE 45

MEAN GRADE EQUIVALENT SCORES AND GAINS FOR INTENSIVE READING INSTRUCTIONAL TEAM PUPILS IN VOCABULARY, SCHOOL YEAR 1966-1967

	N	Mean Grade Equivalent Scores		
		Beginning	End	Gain
Barnard-Brown	45	4.9	6.2	1.3
	45	3.2	3.7	.5
Brackett	45	5.2	6.4	1.2
	45	3.4	3.9	.5
Hooker	30	4.0	4.7	.7
Kinsella	15	3.7	4.8	1.1
Northwest-Jones & Vine	36	3.6	4.9	1.3
West Middle	35	4.1	5.2	1.0
Wish	45	4.1	5.2	1.1

An inspection of the Table 45 reveals that the measured vocabulary gains ranged from .5 to 1.3 over the maximal ten week instructional period, with an over-all gain of approximately .4 last reported over the 1965-66 figures.<sup>1</sup>

Mean Comprehension scores showed the same pattern of growth as did the vocabulary scores. Again, the mean gain had increased over last year's figure by approximately four months, with individual group gains ranging from .6 to 1.7. These figures are shown in the following table:

<sup>1</sup> Ibid., p. 204

TABLE 46

MEAN GRADE EQUIVALENT SCORES AND GAINS FOR INTENSIVE  
READING INSTRUCTIONAL TEAM PUPILS IN COMPREHENSION, SCHOOL YEAR 1966-1967

	N	Mean Grade Equivalent Scores		
		Beginning	End	Gain
Barnard-Brown	45	3.2	4.0	.8
	45	4.8	6.1	1.3
Brackett	45	3.3	3.9	.6
	45	5.5	6.3	.8
Hooker	30	3.7	4.4	.7
Kinsella	15	3.7	4.4	.7
Northwest-Jones & Vine	36	3.4	4.5	1.1
West Middle	37	4.1	5.1	1.0
Wish	45	3.8	5.5	1.7

A compilation of the vocabulary and comprehension data into a total reading score proved particularly interesting. Here again, individual group scores generally surpassed those reported during the previous year, with an overall total increase of approximately four months in growth, as shown in Table 47.

TABLE 47

MEAN GRADE EQUIVALENT SCORES AND GAINS FOR INTENSIVE READING INSTRUCTIONAL TEAM PUPILS IN TOTAL READING SCHOOL YEAR 1966-1967

Sending School	N	Beginning	End	Gain
Barnard-Brown	45	3.2	3.9	.7
	45	4.9	6.3	1.4
Brackett	45	3.3	4.0	.7
	45	5.4	6.4	1.0
Hooker	30	3.8	4.6	.8
Kinsella	15	3.7	4.6	.9
Northwest-Jones & Vine	35	3.6	5.0	1.4
West Middle	36	4.1	5.1	1.0
Wish	45	3.9	5.4	1.5

Conclusions

In the light of available reading achievement test results it can be concluded that:

1. Substantial mean gains were made by pupils enrolled in the IRIT program in the areas of vocabulary, comprehension, and total reading achievement.
2. 1966-67 group gains generally equalled or surpassed those reported for comparable IRIT cycles during the previous school year.

## PART 2

### EFFECTS OF IRIT INSTRUCTION ON MEASURED INTELLIGENCE

#### Problem

The purpose of this phase of the evaluation was to determine the effects of intensive reading instruction on measured intelligence.

#### Design

As part of a city-wide testing program, all pupils enrolled in grades four through six in the validated schools were tested with the Lorge-Thorndike Intelligence Tests in June 1966. Children admitted to the program were retested with the same form during the last week of IRIT instruction.

Both verbal and nonverbal test scores were analyzed, and means, standard deviations, and z-scores were calculated at the .05 level of confidence, for a sample of seventy-one children representing five of the validated schools. The analysis of these scores is contained in Table 48.

TABLE 48

#### COMPARISON OF MEAN MEASURED INTELLIGENCE SCORES FOR SELECTED PUPILS FOLLOWING TEN WEEKS OF IRIT INSTRUCTION, SCHOOL YEAR 1966-1967

Group and Subtest	N	June 1966			POST, IRIT			Mean Diff.	Signif.
		Mean I.Q.	Range	S.D.	N	Mean I.Q.	Range		
Hooker & Kinsella Verbal <sup>b</sup> Nonverbal	39	93.6	74-119	9.87	40	93.6	78-112	8.97	4.3
					40	97.9	75-122	12.48	
Northwest-Jones & Vine Verbal <sup>b</sup> Nonverbal	4	112.3	79-90	4.79	30	93.7	64-112	11.11	1.70
					30	97.1	75-121	12.68	

<sup>a</sup>The Hooker and Kinsella group was tested in April and the Northwest-Jones and Vine pupils in March 1967.

<sup>b</sup>Verbal I.Q. testing begins in grade 4.

From the preceding table, it can be seen that changes in the mean nonverbal I.Q., while positive, were not significant at the stated level of confidence. Neither was verbal data available in sufficient amounts for a meaningful analysis.

Conclusion

Intelligence test data which was tabulated from a limited sample of pupils indicated no significant gains following ten weeks of IRIT intensive reading instruction.

PART 3

TEACHER EVALUATION OF THE IRIT PROGRAM

Problem

Does the classroom teacher think that the gains in reading derived from IRIT attendance offset the child's absence from the classroom each morning for periods ranging from nine to ten weeks in length?

Design

To assess the total effects of the IRIT program on the classroom teacher, the reading department developed a Teacher Evaluation Form. This form consisted of two parts. One part contained a series of five questions related to the effects of IRIT reading instruction while the second part was used for teacher comments. Data was collected from fourteen of the eighteen teachers contacted and this information is summarized below.

TABLE 49

SUMMARY OF TEACHER RESPONSES TO AN IRIT PROGRAM  
EVALUATION FORM, SPRING 1967

Question	Per cent of Responses N=14			
	More	Some	None	Less
1. What improvement have you noticed in reading skills?	36	64		
2. Have you noticed any improvement in their attitude toward reading?	57	43		
3. What apparent changes have you noticed in the pupil's attention span?	36	43	14	7
4. What apparent changes have you noticed in better behavior?	21	29	50	
5. Were you able to visit the IRIT program to see it in action?	71	29		

Comments appearing in the Teacher Evaluation Forms were reported as follows:

1. Motivation of children was excellent. Use of audio-visual material was excellent. I felt the effectiveness was excellent; the organization among the teachers in the skill areas was well planned.
2. It was difficult to tell at this time because I have not had these children back in my reading groups. It appears that their interest in reading activities has grown. From what I have observed the teachers in the IRIT are doing a wonderful job over there.
3. I think the program was well balanced. If such a program could be set up in each school for the same period of time, this may be more effective.
4. More children could benefit from a program like this.
5. The wealth of materials available for use is a positive aspect of the program. I would suggest an expanded program to include a larger number of students.
6. The program has definite influence in changing attitudes and increasing interest in reading.
7. From the limited observations of the results of this program which I have been able to observe, I think it is practical and excellent.
8. The children in my class seem very enthused about it.
9. Program allows children greater participation because of small size of group. I suggest teachers make available worksheets children could do after they leave IRIT to keep them in practice with skills they have learned.

10. Diversification, small grouping -- positive. Noticed no negative reactions. Some correlation with science and social studies is suggested.
11. The most rewarding thing is to have these youngsters return and discover that they can read more in their social studies, science and English books. I wish there were some way to include spelling in the program. This was the only subject that the boys and girls had trouble with.
12. Positive aspect - small classes.
13. Good citizenship and a new positive look towards enjoyment of reading. IRIT is run pretty well now.
14. For some reason my pupils seemed to fall down in their afternoon work.
15. Two of the students were tired, restless, and inattentive in the afternoon. The program seemed too intense for them.

#### Conclusions

A summary of the data collected from fourteen classroom teachers, shows that:

1. The majority of the responses - 86 per cent - indicate some improvement in the areas investigated as a result of IRIT attendance.
2. Pupil attention span was reported as being lessened, following IRIT attendance by one teacher, while no changes in the same area were reported by two teachers.
3. Seven teachers, representing 50 per cent of those contacted, felt the IRIT program had no effect upon classroom behavior.

From this evidence, it can be concluded that IRIT participation is generally effective in terms of the stated program objectives; that of helping children to read.

PART 4

PARENT EVALUATION OF THE IRIT PROGRAM

Problem

How does the parent view the IRIT instruction?

Design

To investigate the parent's evaluation of IRIT instruction, the reading department developed a letter questionnaire. This questionnaire was distributed to the parents of all children enrolled in the IRIT centers. This distribution took place half way through the instructional program. From the 205 returned questionnaires, a return requesting approximately 44 per cent of the total year's enrollment, the following data was obtained:

TABLE 51

SUMMARY OF 204 PARENT RESPONSES TO AN IRIT PROGRAM EVALUATION,  
SCHOOL YEAR 1966-1967

Question	Per Cent of Responses <sup>a</sup>			
	Much	Some	None	No Response
1. Does your child enjoy attending the Reading Program?	84	16	1	0
2. Do you think the Reading Team is helping your child with his reading?	81	20	0	0
3. Does your child spend any more time reading at home?	41	48	6	5
4. Do you think the time in reading school is helping your child with his other classes?	61	38	2	1
5. Has your child talked to you about reading school?	62	31	2	5
6. Does your child enjoy having three teachers in reading school?	81	16	3	0
7. Would you like to have your child attend reading school again?	84	9	6	1

<sup>a</sup>All responses are rounded and may not equal 100.

It should be noted that:

1. A vast majority of responses indicated that parents felt their children had enjoyed the IRIT enrollment.
2. Fully 81 per cent of the parents thought the program had helped their children.
3. Only thirteen parents, representing 6 per cent of the total queried, did not feel that a second instructional cycle would be desirable.

The contention that IRIT instruction is both enjoyable and helpful is further borne out by a number of parent comments, extracted at random from the questionnaire.

Thank you very much. "G \_\_\_ enjoys her reading class and is just beginning to realize that reading can be fun."

J \_\_\_ enjoys her reading class very much. She loves her teacher, too.

E \_\_\_ is doing very well, since attending reading school. However, I feel he needs different reading material at home.

R \_\_\_ enjoys her reading class very much. She loves her teachers, too.

I was very glad to have D \_\_\_ attend this extra reading class. She enjoyed the school very much. Liked the teachers. Seemed to be enthused over the changing of rooms and working machines. She talked of it constantly. I think it gave her a sense of importance also.

I should like to see this program for more students who are slow in reading, this program should be geared to all children who need help.

#### Conclusions

From the data presented, it can be concluded that Hartford parents like the IRIT program. They feel it is an enjoyable and effective way to teach their children to read.

PART 5

PUPIL EVALUATION OF THE IRIT PROGRAM

Problem

What does the enrolled pupil think of his IRIT experiences?

Design

To investigate the direct experiential effects of IRIT exposure, a reading department-developed IRIT Student Evaluation Form was distributed to 114 pupils enrolled in the program. Responses were tabulated as follows:

TABLE 52

SUMMARY OF RESPONSES TO AN IRIT STUDENT EVALUATION FORM,  
SCHOOL YEAR 1966-1967

Questions	Response N=114				
	Very Much	Some	Not At All	Don't Know	No Answer
How much did you like changing classes?	92	17	3	1	1
How much did you like having three teachers?	54	25	5	0	30
How much do you feel reading school has helped your reading?	95	12	0	1	6
How hard was the work in reading school for you?	1	90	17	6	0
How happy are your parents with the work you did in this school?	78	9	1	26	0

TABLE 52 (con't.)

Question	Yes	No	Don't Know	No Answer
Would you want to go to reading school again?	71	28	15	0
Are there some things about reading school you did not like?	30	80	3	1
Are there some things about reading school you liked very much?	102	7	4	1
Do you think it is a good idea for boys and girls to go to the reading school if they need help in reading?	105	5	3	1

A summary of the responses contained in Table 52 showed that a majority of the pupils questioned:

1. Liked the novelty of having three teachers and changing classes.
2. Felt that they were helped in reading by their IRIT experiences.
3. Thought that their parents were happy about their IRIT work, although twenty-three of the pupils were not sure about their parents' feelings on this score.

#### Conclusions and Summary

From the evidence available, it appeared that a large majority of the contacted pupils liked their IRIT experiences and felt that it had helped in the improvement of their reading.

PART 6

SOME FOLLOW-UP INQUIRIES INTO PROLONGED READING ACHIEVEMENT

Problem

Do significant gains in reading achievement, obtained as the result of a six to eleven week period of intensive reading instruction, carry-over into the next school year?

Design

To determine the long-range achievement effects of IRIT instruction, 92 children, representing 24 per cent of the total 1965-66 enrollment of 386, were tested March and April 1967 with Form Y of the California Reading Achievement Test.<sup>1</sup> Means, and standard deviations were calculated and these were compared with the scores obtained at the end of the 1965-66 IRIT instructional period, using a test of mean difference at the .05 level of confidence, as shown in Table 53.

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<sup>1</sup>Evaluation 1965-1966, pp. 203-207.

TABLE 53

MEAN GRADE EQUIVALENT SCORES OF IRIT STUDENTS FOLLOWING 7 MONTHS OF CLASSROOM PLACEMENT, SPRING 1967

	N	Mean G.E.			
		End of IRIT <sup>a</sup>	Spring 1967	Change	Significance
Barnard-Brown					
Vocabulary	31	4.2	4.2	-.1	.43
Comprehension	31	4.2	4.1	-.1	.43
Total Reading	31	4.2	4.2		
Brackett-Northeast					
Vocabulary	35	3.8	4.6	.8	6.37
Comprehension	35	3.8	4.6	.8	5.35
Total Reading	35	3.8	4.7	.9	7.69
Northwest-Jones					
Vocabulary	26	5.2	5.2		
Comprehension	26	5.3	5.9	.6	3.10
Total Reading	26	5.3	5.6	.3	2.56

When 92 children were tested with the California Reading Achievement Test following seven months of regular class placement, the results revealed:

1. No significant changes in scores for the Barnard-Brown group.
2. Continued significant gains in vocabulary, comprehension, and total reading for the Brackett-Northeast children.
3. Significant gains in comprehension and total reading for the Northwest-Jones pupils.

#### Conclusions

When a sample of 92 children were re-tested in reading achievement following IRIT instruction and a regular class placement of seven months it was found that:

1. Approximately 66 per cent of the tested group continued to make significant gains in comprehension and total reading, while 38 per cent made gains in vocabulary, only.
2. Of the remaining children tested, there was no significant change in achievement scores since the end of the IRIT cycle. Consequently, it can be assumed that the gains obtained are still being maintained, although not necessarily improved upon.

From the foregoing data, it appears that reading achievement gains resulting from IRIT instruction are being maintained or improved upon by the pupils concerned in a regular classroom setting.

C

SUMMARY AND CONCLUSIONS

For the second consecutive year, three Intensive Reading Instructional Teams provided a concentrated instructional approach to the reading problems of the inner city.

Findings obtained during the 1966-67 school year continued to show:

1. Significant mean gains in vocabulary, comprehension, and total reading for the pupils enrolled in the program.
2. No evidence indicating that gains in reading achievement produce changes in the measured I.Q. level.
3. An acceptance of the program by both parents and pupils coupled with the feeling that it is beneficial in helping individual children to read.

Additional studies, conducted for the first time, indicate that:

1. Teachers feel the IRIT program is effective in helping children to read.
2. IRIT-produced achievement gains are generally maintained or increased following the pupil's placement in a regular classroom setting.

## READING CLINIC

### DESCRIPTION

The third and most intensive level of reading instruction continues to be the reading clinic. Upon referral from the reading specialist, children with difficulties too severe for classroom remediation are sent to the clinic for daily periods of individual instruction time. As the child progresses, he is released from the clinic and scheduled for remedial classes in his own school or in one of the IRIT centers.

The clinic continues to be staffed by a reading specialist, three teachers, and an aide-secretary, and functioned with a full staff for most of the 1966-67 school year.

While the clinic experienced relatively few operational changes during its first full year, a number of activities were reported as being particularly successful. These can be described as follows:

1. The use of experience stories. These stories contained excellent motivational qualities, and coupled with the youngster's desire to communicate, served to disclose his needs in the areas of spelling, sentence structure, and punctuation. The students typed and illustrated these stories, and good gains were reported in the areas of functional vocabulary growth, clarity of expression, sequencing of events, and interesting comments.
2. The use of a typewriter was highly successful as a stimulus for the development of written language.
3. The Language Master was a popular and efficient means of building vocabulary, encouraging correct speech patterns and enriching conceptual backgrounds. This was used with a number of excellent teacher-made materials.

4. The most successful activity was the wide reading that was done by pupils. A carry-over of this activity was encouraged in the school classroom and at home, with youngsters beginning to realize that reading was an activity that could be enjoyed at any time and in any place.
5. An increased speed of perception resulted from the use of the tachistoscope and controlled reading materials. This increase was manifested in more fluent oral reading and better comprehension, while an increase in rate was noted in the silent reading. Progress charts were used for competition and to provide an added interest in self-improvement.

One problem area was reported. The clinic staff's attempt to assign formal homework did not meet with success, and consequently more informal reading assignments were accented.

#### EVALUATION

During the 1966-67 school year, the clinic provided intensive reading instruction to twenty boys and one girl for varying periods of time. Since each child's program was individualized, a brief look at some of the techniques reported seems noteworthy.

1. Three pupil's programs included the use of Fernald's VAKT method in the beginning stages of vocabulary development. All three children were able to gradually eliminate the kinesthetic and tactile stimulation steps and develop vocabulary with the use of this visual-auditory technique.
2. The Frostig training materials were used with six youngsters. Improvement in all cases was seen.

3. Sixteen programs included the use of the Tachistoscope and Controlled Reader with an attendant improvement in eye span, comprehension and rate of reading.
4. All programs included the use of the typewriter, tape recorder, record player, and film strips stressing both skills and literary content.

While any detailed analysis of clinic activities would involve lengthy individual case studies, a number of evaluative facets can be extracted from the provided clinic data. The following seem particularly valuable:

1. Twenty-one children, when tested at the beginning and end of the clinic referral with two forms of the California Reading Achievement Test (Forms X and W), showed a mean gain of 1.0 years.
2. When tested with the Botel Word Recognition Test (Form B), 21 children showed mean gains of 5.3 months during the period of instruction.
3. Twenty children from the same group gained an average of 16.2 per cent, when tested with the Dolch Basic Sight Vocabulary. Fourteen of these children also gained an average of 9.8 months when tested with an Informal Reading Inventory, containing materials based upon the Allyn and Bacon instructional series.

To provide some insight into the pupils' reaction to the clinic, a reading department-devised Clinic Student Evaluation Form was completed by all children who were enrolled in the program in May 1967. A tabulation of these responses is contained in Table 54. Note that the children respond favorably to all items except number five, (which was ambiguous) and number eight.

TABLE 54

TABULATION OF 20 PUPIL RESPONSES TO A READING CLINIC EVALUATION FORM, MAY 1967

Question	Number of Responses	
	Yes	No
1. Do you like coming to the clinic?	20	0
2. Do you enjoy your reading at the clinic?	20	0
3. Are there some things about the clinic that you do not like?	6	14
4. Are there some things about the clinic that you like very much?	20	0
5. Are your parents happy to have you come to the clinic?	20	0
6. Would you like to come to the clinic next year?	16	4

The children's comments were equally revealing and reinforced the contention that the clinic experiences were pleasurable ones. (Comments are keyed by number to the questions in Table 54.)

3. Are there some things about the clinic that you do not like?

"I don't like it when I miss gym and swimming."

"I don't like to come on rainy days."

"I don't like to come in the bus it is too far."

"Not a lot of science books."

"I don't like coming on cold days."

"The controlled reader."

4. Are there some things about the clinic that you like very much?

"Typewriting, writing stories and everything."

"I like the machines. I especially like the Controlled Reader."

"I like everything about it."

"Typing, games."

"Read - everything."

"Tape recorder, typewriter, read any books."

"Tape recorder. Typewriter."

"Typewriter, tape recorder, language master."

"I like the machines and I like my teacher."

"I like the reading and the book to read."

"Language Master."

"I like the language master."

"Controlled Reader."

"Reading books, type, movies, language master, spelling, writing stories."

"I like the typewriter, the Controlled Reader, Language Master, writing stories for my notebook, reading other books."

"I like the typewriter, Tape Recorder and Language Master, Overhead Projector."

"Read books and type. Tach, S.R.A. Language Master."

"Write stories, read books, language master, S.R.A., type, Controlled Reader, Overhead, Games, Movies."

"Type, Controlled Reader, Overhead, Read Books, Language Master, Games, Movies, Tach (large & hand), Tape Recorder."

"Read books, type, Tach Machine, Overhead Projector, Controlled Reader, Language Master, Draw pictures of stories, Tape Recorder."

6. Would you like to come to the clinic next year?

"I like all the machines. I like to write stories for my book."

"I would like to be in my own classroom for the whole day."

"I would not like to come to the clinic because I miss math and when I go home I can't do my homework."

"I live far from the clinic. I'll miss time in seventh grade at the Moylan School."

A Clinic Parent Evaluation Form, which was similar in many respects to the form provided the children, was distributed in May 1967. Sixteen parents, representing seventy-three per cent of the twenty-two children then enrolled in the clinic, responded. As can be seen, both the completed questionnaire and the attached comments indicated that parents were pleased with the clinic services provided for their children.

TABLE 55

SUMMARY OF 16 RESPONSES TO A PARENT CLINIC EVALUATION FORM, MAY 1967

Question	Number of Responses		
	Much	None	Some
1. Has your child enjoyed attending the Reading Clinic?	14	0	2
2. Does your child spend any more time reading at home?	3	2	11
3. Has your child talked to you about the clinic?	8	1	7
4. Have you been glad to have your child attend the Reading Clinic?	16	0	0
5. Would you like to have your child continue in the clinic next year?	15	1	0

Reported comments include:

1. ----- does a lot of reading at home since he has been attending the Reading Clinic. We are very much pleased with him.
2. He is confident that he is getting help. He realizes other children from different schools have the same problem.
3. When he does well he is proud of himself - somewhat withdrawn when he doesn't do so well.
4. I feel this program is a necessity. There are many more like him. Should be continued--they need it like the fourth "R".

5. I think the reading program is a very nice program for the kids. I am glad that ----- seems interested in the reading. I hope he will be interested in it next year.
6. I would like to have my child continue in the clinic next year if it don't interfere in his other work.
7. -----'s attending these classes has helped him in many ways.
8. I think ----- enjoys reading more since he has been at the clinic. I continue to try and get him to read more at home by getting him books which he can read to the other children in the family. I'm making some progress.

What does the classroom teacher think of the clinic? Comments extracted from a reading department-developed Teacher Evaluation Form clearly indicate that:

1. Clinic services help the children enrolled. This help is directly related to reading improvement which may spill over into other classroom areas.
2. The classroom teacher desires a closer contact with the clinic. While efforts have been made to have teachers visit the clinic, and periodic progress reports on the pupils are prepared, a number of comments make this an area of special concern for the coming year.

#### SUMMARY AND CONCLUSIONS

A reading clinic, initially established during the 1965-66 school year, continued to provide intensive remediation to a number of severely handicapped children. Data obtained from investigations conducted during 1966-67 support the contention that the program is effective in helping children to read.

PROGRAM EVALUATION AND  
SUPPORT SERVICES

(Hartford SADC Project V)

DESCRIPTION

To actively facilitate the continued procurement of materials and services, and provide for project evaluation,

1. The evaluator's salary and expenses were transferred from Project I to Project V.
2. Salaries for the assistant purchasing officer and the necessary clerical help for processing the added SADC procurement requirements were continued.

SUMMARY

The continued implementation of this project permitted the employment of essential service personnel which were necessary to attend to the multiplicity of details involved in the operation, expansion, and evaluation of SADC-funded programs.

**APPENDIX I**

**Summary Evaluation of  
P.A. 523 Programs For Fiscal Year 1967**

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS

FOR FISCAL YEAR 1967

Project Director Mary S. Farquhar, EdD Date Evaluation was submitted June 10, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523

(Hartford SADC Project I: Speech and Hearing)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 683
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 0
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 1 - varying periods of time
5. What was the duration in weeks of project activities for youth? 40
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
11	40	68	91	154	83	93	48	17	10	19	34	13	2	15

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS  
FOR FISCAL YEAR 1967

Project Director Annette C. Gillette, PhD Date Evaluation was submitted June 10, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523

(Hartford SADC Project I: Psychological Examiners)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 781\*
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 38
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 5 hrs. per child (est.)
5. What was the duration in weeks of project activities for youth? 40
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
	447*	54	43	31	28	19	18	14	9	35	15	22	8	38

\* Includes 432 children tested as part of a pre-kindergarten survey.

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS  
FOR FISCAL YEAR 1967

Project Director Helen D. Conley Date Evaluation was submitted June 1, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523

(Hartford SADC Project I: Health Services)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 2155
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 0
4. What were the approximate hours per week of services provided for each child or youth participating in the project? not applicable
5. What was the duration in weeks of project activities for youth? 40
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
										597				2155*

\* H.P.H.S. grades 9-12

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS  
FOR FISCAL YEAR 1967

Project Director Ellis D. Tooker. EdD Date Evaluation was submitted June 9, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P. 523

(Hartford SADC Project I: Guidance Counselors)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 2292
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 0
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 11
5. What was the duration in weeks of project activities for youth? 40
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
	132	182	138	98	86	134	273	304	87	205	285	207	110	51

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS

FOR FISCAL YEAR 1967

Project Director Pauline F. Murray Date Evaluation was submitted June 1, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:

- Title I, P.L. 89-10
- P.A. 523
- Jointly funded Title I and P.A. 523

(Hartford SADC Project I: School Social Workers)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 4063
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 0
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 1
5. What was the duration in weeks of project activities for youth? 40
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
	13	38	34	35	25	28	10	15	20	61	29	18	10	3727*

\* 2067 brief services are included

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS

FOR FISCAL YEAR 1967

Project Director Robert C. Miles, PhD Date Evaluation was submitted July 1, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523  
 (Hartford SADC Project I: Cultural Enrichment)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 17086\*
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 0
4. What were the approximate hours per week of services provided for each child or youth participating in the project? not applicable
5. What was the duration in weeks of project activities for youth? 40
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
	1729	2014	1561	1365	1304	1182	1124	1045	887	1490	1043	964	721	657

\*Figures are based on the May 31, 1967 enrollment.

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS

FOR FISCAL YEAR 1967

Project Director Edward McKinney Date Evaluation was submitted June 30, 1967

Project Evaluator Robert Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number IIa Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 103
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 0
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 30 hours
5. What was the duration in weeks of project activities for youth? 37
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
										103				

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS

FOR FISCAL YEAR 1967

Project Director G. William Saxton Date Evaluation was submitted June 24, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523  
(Hartford SADC Project IIb: Curriculum Research and Development)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 17086
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 0
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 10-15
5. What was the duration in weeks of project activities for youth? 40
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
	1729	2014	1561	1365	1304	1182	1124	1045	887	1490	1043	964	721	657

\* Figures are based on the May 31, 1967 enrollment.

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS

FOR FISCAL YEAR 1967

Project Director Karen Graber Date Evaluation was submitted June 8, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523

(Hartford SADC Project III: Speech and Language Improvement)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 1600
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. 0
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 1 hr. 40 min.
5. What was the duration in weeks of project activities for youth? 35 weeks
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
		1600												

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS

FOR FISCAL YEAR 1967

Project Director M. Beatrice Wood Date Evaluation was submitted June 10, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:

Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number IV Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 274
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. None
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 1 1/2 - 2 hrs.
5. What was the duration in weeks of project activities for youth? 40
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
				174	66	28	6							

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS

FOR FISCAL YEAR 1967

Project Director M. Beatrice Wood Date Evaluation was submitted June 9, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:

( ) Title I, P.L. 89-10

(X) P.A. 523

I. R. I. T.

( ) Jointly funded Title I and P.A. 523

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number IV Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 469
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. None
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 15 hours
5. What was the duration in weeks of project activities for youth? 40 weeks
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
					195	184	90							

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS  
FOR FISCAL YEAR 1967

Project Director M. Beatrice Wood Date Evaluation was submitted June 9, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:

( ) Title I, P.L. 89-10

(X) P.A. 523

( ) Jointly funded Title I and P.A. 523

READING CLINIC

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number IV Town or cooperating towns Hartford
2. Give an unduplicated count (eliminate double counting) of public school children and youth served by the approved project. 21
3. If a Title I project is being reported, give an unduplicated count of non-public school children and youth served by the approved project. None
4. What were the approximate hours per week of services provided for each child or youth participating in the project? 5 hours
5. What was the duration in weeks of project activities for youth? 33 weeks
6. Give the actual number of all children (include non-public school children if any) by grade level benefiting directly from project services..

Pre-school	K	1	2	3	4	5	6	7	8	9	10	11	12	Other
			2	11	5	2	1							

SUMMARY EVALUATION OF P.A. 523 AND TITLE I, P.L. 89-10 PROGRAMS  
FOR FISCAL YEAR 1967

Project Director Philip R. Blackey Date Evaluation was submitted June 30, 1967

Project Evaluator Robert J. Nearine Source of Project Funds:  
 Title I, P.L. 89-10  
 P.A. 523  
 Jointly funded Title I and P.A. 523

(Hartford SADC Project V: Program Evaluation and Support Services)

I COMPREHENSIVE DATA (Submit data for this section directly on this form)

1. Project Number 64-1 Town or cooperating towns Hartford

(Questions 2-6 do not apply to this Project)

8. List below the criteria used to select children for services of the project being reported.

See the narrative description.

10.

- a. List the number of children and youth directly served by the project who were promoted to the next grade level for the school year of 1967-68. 15116
- b. List the number of children and youth directly served by the project who were not promoted to the next grade level for the school year 1967-68. 1376

11.

- a. Give the aggregate days of attendance of children and youth directly served by the project. 2840300
- b. Give the aggregate days of membership of children and youth directly served by the project. 3186748
- c. List the number of grade 7-12 youth served by the project who withdrew from school upon reaching their 16th birthday during school year 1966-67. 588
- d. List the number of grade 7-12 youth served by the project who continued in school upon reaching their 16th birthday during the 1966-67 school year. 5760\*\*

\* Validated school registers D1-D17

\*\* Estimated

## PROJECT I

Restatement of Objectives	Expected Learning Outcomes	Major Activities	Evaluative Instrument	Findings Test, Mean Change, Significance
<p>1)To identify and correct speech disorders.</p> <p>2)To assist children in developing effective speech.</p> <p>3)To provide information about individual children.</p> <p>4)To interpret assessment data to teachers.</p> <p>5)To improve the general health of pupils.</p> <p>6)Provide occupational and educational information and encouragement to students.</p> <p>7)Provide additional school social work services.</p> <p>8)To compensate for the lack of cultural opportunity in the typical poor child's home.</p> <p>9)To increase the child's cultural horizons.</p>	<p>1)Increased clarity of speech.</p> <p>2)Speech is understood and accepted by others.</p> <p>3)The child's total environment for learning is improved.</p> <p>4)To provide information about individual children.</p> <p>5)To interpret assessment data to teachers.</p> <p>6)Provide additional school social work services.</p> <p>7)To increase the child's cultural horizons.</p> <p>8)To compensate for the lack of cultural opportunity in the typical poor child's home.</p> <p>9)To increase the child's cultural horizons.</p>	<p>1)Provided increased numbers of children with speech therapy.</p> <p>2)Assisted school staffs to work with children having speech problems.</p> <p>3)Provided individual pupil assessments.</p> <p>4)Provided additional nursing and hygienist service.</p> <p>5)Provided additional counseling service.</p> <p>6)Provided increased school social services.</p> <p>7)A significant number of cultural activities were provided to approximately 17000 children and youth.</p>	<p>1)Speech clinician reports.</p> <p>2)Teacher evaluations.</p> <p>3)Statistical reports by special service.</p> <p>4)Cultural survey.</p>	<p>1)430 children received speech therapy. 100% increase over previous year.</p> <p>2)Teachers feel speech service necessary.</p> <p>3)Increased psychological services provided.</p> <p>4)Increased health inspections and conferences; added dental service.</p> <p>5)Counselors feel that services are helping children.</p> <p>6)Teachers feel counseling has positive effects upon children.</p> <p>(Table 14-15)</p> <p>7)Increased SSW activities.</p> <p>8)A sample survey continues to show that substantial activities are provided children in the validated schools. (Tables 20-21)</p>

## PROJECT II

Restatement of Objectives	Expected Learning Outcomes	Major Activities	Evaluative Instrument	Findings, Test, Mean Change, Significance
<p>1) To construct, plan and modify a comprehensive social studies and science curriculum for grades K - 12.</p> <p>2) To provide in-service training in the use of the curricula.</p>	<p>1)Facilitate the learning of the inner-city child.</p>	<p>1)Constructed a K-3 social studies curriculum framework.</p> <p>2)Developed a 9-10 curriculum structure supporting concepts taught in American Democracy (Grade 12).</p> <p>3)Completed preliminary planning for work on materials in grades 4-5.</p> <p>4)Provided in-service training, demonstration lessons, and social studies curriculum support to the total validated staff.</p> <p>4)Pilot publication of over 16 curriculum guides and associated materials.</p> <p>5)Initial piloting of 12 science units.</p>	<p>1)Attitudinal Rating Scale.</p> <p>2)Activities count.</p>	<p>1)Substantial positive changes following an experimental science unit (Table 26).</p> <p>2)For a tabulation of piloted materials, see Tables 22-25.</p>
				<p>1)L-T Verbal I.Q. (Table 27)</p> <p>Ex 4.2 S</p> <p>Con 1.5 NS</p> <p>2) L-T Nonverbal I.Q. (Table 28)</p> <p>Ex 4.5 S</p> <p>Con .4 NS</p> <p>3) Iowa Silent Read (Tab 2c)</p> <p>Ex 14.5 S</p> <p>Con -</p>

**Restatement of Objectives**

**Expected Learning Outcomes**

**Evaluative Instrument**

**Findings, Test, Mean Change, Significance**

3) <u>Metropolitan Ach., pre and post.</u>	4) <u>Metro Ach-Reading (Table 30)</u>
4) <u>SRA Writing Skills pre and post.</u>	Word Knowledge Ex 2.6 S Con -
5) <u>California Test of Personality, pre and post.</u>	Reading Ex 3.1 S Con -
6) <u>Teacher Rating Scale, pre and post.</u>	5) <u>SRA Writing Skills (Table 31)</u>
7) <u>Self-Rating Scale, pre.</u>	Boys Ex 18.2 S Con -
8) <u>Pupil Self-Rating Scale, post.</u>	Girls Ex 19.2 S Con -
	6) <u>Metro Ach-Lang, Spell, Arith Comp (Table 32)</u>
	Language Ex 8.6 (post) Con -
	Spelling Ex 9.1 (post) Con -
	Arith Comp Ex .7 S Con 7.3 (post)
	7) <u>California Personality (Table 33)</u>
	Personal Adjustment Ex 30.3 S Social Adjustment Ex 13.0 S
	8) <u>Teacher Rating Scale (Table 34)</u>
	Bcys Ex -.59 Con -

**Restatement of  
Objectives**

Expected  
Learning Outcomes

**Evaluative  
Instrument**

Findings,  
Test, Mean Change,  
Significance

		8)(continued)
Girls		
Ex	-.69	
Con	-	
9)Self-Rating Scale (Tab 35)		
Boys		
Ex	1.80 (pre)	
Con	2.00 (pre)	
Girls		
Ex	1.74 (pre)	
Con	1.77 (pre)	
10)Pupil Self-Rating Scale (Table 36)		
Boys	.19	
Girls	.41	

### PROJECT III

Restatement of Objectives	Learning Outcomes	Major Activities	Evaluative Instrument	Findings Test, Mean Change, Significance																																				
<p>1) To develop positive attitude toward communication in educational setting.</p> <p>2) To develop listening skills-both comprehension and discrimination.</p> <p>3) To develop more adequate vocabulary.</p> <p>4) To develop more adequate articulation patterns.</p> <p>5) To develop more adequate grammatical patterns.</p>	<p>1) Increased participation in verbal communication in classroom.</p> <p>2) Increased attention span for oral presentations.</p> <p>Able to carry out oral instructions of increasing difficulty.</p> <p>Recall of details, and sequencing of meaningful and non-meaningful information is greater.</p> <p>Identifies and discriminates between speech sounds.</p> <p>Able to understand and use an increasing number of words.</p> <p>Produces more speech sounds correctly.</p> <p>Uses more complete sentences.</p> <p>More sentences used are grammatically correct.</p>	<p>Structured Speech Improvement lessons were presented by the classroom teacher each day for 20-30 min. The "Who Am I?" and "Who Am I? People" units were designed to stimulate verbalization while other lessons were designed to modify certain verb and pronoun forms and to build vocabulary. Both of these types of lessons were written by the staff. The <u>Child Speaks</u> was written by Dr. M.C. Byrne and the lessons contained in this syllabus were designed to modify and refine articulation skills and build listening skills. A unit devoted to work on the "ng" sound was also written by the staff.</p> <p>-3 sections of the Illinois Test of Psycholinguistic Abilities (Aud.Voc.Aut., Aud. Voc. Assoc., Aud. Voc. Seq.) Population involved: 120 Experimental (60 from 2 different schools) 60 Control (1 school)</p>	<p>1) Judgments made by teachers on "Teacher" Evaluation Form" (18 times during the year) and "Speech and Lang. Inventory" Forms. These were constructed by staff in conjunction with consultant.</p> <p>2, 3, 4, 5) These objectives are being evaluated with the following:</p> <ul style="list-style-type: none"> <li>-50-Item Templin-Darley Screening Test</li> <li>-Spontaneous Picture Articulation Test (Farguhar)</li> <li>-Peabody Picture Vocabulary Test</li> </ul> <p>PPVT (Table 38)</p> <p>2) Sections of the Illinois Test of Psycholinguistic Abilities (Aud.Voc.Aut., Aud. Voc. Assoc., Aud. Voc. Seq.) Population involved: 120 Experimental (60 from 2 different schools) 60 Control (1 school)</p> <p>ITPA Verb Anal (Tab 39)</p>	<p><u>Templin-Darley</u>(Tab 38)</p> <table border="1"> <thead> <tr> <th>Boys</th> <th>Ex .9</th> <th>NS</th> </tr> </thead> <tbody> <tr> <td>Con 5.4</td> <td>S</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Girls</th> <th>Ex 3.0</th> <th>NS</th> </tr> </thead> <tbody> <tr> <td>Con 4.7</td> <td>NS</td> <td></td> </tr> </tbody> </table> <p><u>Farguhar</u>(Table 37)</p> <table border="1"> <thead> <tr> <th>Boys</th> <th>Ex 7.4</th> <th>S</th> </tr> </thead> <tbody> <tr> <td>Con 8.9</td> <td>S</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Girls</th> <th>Ex 4.8</th> <th>S</th> </tr> </thead> <tbody> <tr> <td>Con 10.3</td> <td>S</td> <td></td> </tr> </tbody> </table> <p><u>ITPA</u> Verb anal( Tab 39)</p> <table border="1"> <thead> <tr> <th>Boys</th> <th>Ex 4.0</th> <th>S</th> </tr> </thead> <tbody> <tr> <td>Con 3.0</td> <td>S</td> <td></td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Girls</th> <th>Ex 4.7</th> <th>S</th> </tr> </thead> <tbody> <tr> <td>Con 3.2</td> <td>S</td> <td></td> </tr> </tbody> </table> <p><u>ITPA Gram St</u>(Tab 40)</p>	Boys	Ex .9	NS	Con 5.4	S		Girls	Ex 3.0	NS	Con 4.7	NS		Boys	Ex 7.4	S	Con 8.9	S		Girls	Ex 4.8	S	Con 10.3	S		Boys	Ex 4.0	S	Con 3.0	S		Girls	Ex 4.7	S	Con 3.2	S	
Boys	Ex .9	NS																																						
Con 5.4	S																																							
Girls	Ex 3.0	NS																																						
Con 4.7	NS																																							
Boys	Ex 7.4	S																																						
Con 8.9	S																																							
Girls	Ex 4.8	S																																						
Con 10.3	S																																							
Boys	Ex 4.0	S																																						
Con 3.0	S																																							
Girls	Ex 4.7	S																																						
Con 3.2	S																																							

Taped Language Samples: Children's responses to 3 pictures were taped.  
 Population: random selection of 30 experimental and 30 control.  
 Pre-tape: Nov., 1966  
 Post-tape: Fall, 1967

	Boys	Ex	4.5	S
	Con	3.9	S	
Boys	Ex	5.7	S	
Girls	Con	4.5	S	

ITP<sub>b</sub>, And Rep (Tab 41)

	Boys	Ex	2.7	S
	Con	5.4	S	
Boys	Ex	.2	NS	
Girls	Con	5.0	S	

Unit Evaluations (Tab 42)

Favorable

Teacher Eye<sub>1</sub> (Tab 43)

Favorable

## PROJECT IV

Restatement of Objectives	Expected Learning Outcomes	Major Activities	Evaluative Instrument	Findings, Test, Mean Change, Significance
<b>1) To provide specialized services designed to combat reading disability.</b>	<p>1)To place children on a reading level which is comparable with the mainstream.</p> <p>2)To utilize reading improvement as a tool for increased academic achievement.</p> <p>3)To provide the child with the necessary skills to eventually participate adequately in both educational and job markets.</p>	<p>1)5½ additional reading specialists were placed in the poverty schools.</p> <p>2)3 IRITs provided 469 children with intensive small-group instruction.</p> <p>3)A reading clinic assisted 21 severely handicapped children.</p>	<p>1)<u>California Reading Achievement Test,</u> pre and post.</p> <p>2)<u>Lorge-Thorndike Intel.</u></p> <p>3)<u>Teacher Evaluation pre and post.</u></p> <p>4)<u>Parent Evaluation</u></p> <p>5)<u>Student Evaluation</u></p> <p>6)<u>California Reading Achievement Test - follow-up study, Form Y.</u></p>	<p>1)California Reading Vocabulary (Table 4c .97)</p> <p>2)Comprehension (Tab 4c .98)</p> <p>3)Tot Reading (Table 47 1.04)</p> <p>4)L-T Nonverbal (Table 48)</p> <p>5)Hooker &amp; Kinsella 4.3 NS</p> <p>6)Northwest &amp; Vine 4.0 NS</p> <p>3)Teacher Evaluation (Table 50) Favorable.</p> <p>4)Parent Evaluation (Table 51) Favorable.</p> <p>5)Student Evaluation (Table 52) Favorable.</p> <p>6)California Reading Y (Table 53)</p>

Restatement of Objectives	Learning Outcomes	Major Activities	Evaluative Instrument	Findings, Test, Mean Change, Significance
		<p>7) <u>Pupil Evaluation,</u> Clinic.</p> <p>8) <u>Parent Evaluation,</u> Clinic.</p> <p>9) <u>Teacher Evaluation,</u> Clinic.</p>	<p>7) Pupil Evaluation, Clinic (Table 54) Favorable.</p> <p>8) Parent Evaluation, Clinic (Table 55) Favorable.</p> <p>9) Teacher Evaluation, Clinic. Favorable.</p>	

#### PROJECT V

- 1) To provide supportive services to the SADC projects.
- 2) Salaries for the assistant purchasing officer and necessary clerical assistance were continued.

13. Describe the most successful activities or components of the project.

See the narrative description.

14. List any problems that were encountered in implementing and/or operating the project.

See the narrative description.

15. How did the town overcome the problem of staffing the project? (How did the town get staff or what arrangement made a staff possible for the project?)

The majority of the staff positions were filled by transfer and promotion from within the city. One speech improvement team member and one-half reading specialist position were the only vacancies not filled during the 1966-1967 school year.

**APPENDIX II**

**Questionnaires and Forms  
(Omitted)**